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ABSTRACT

This study by the San Diego Community College District (SDCCD), California, aims to determine the impact of prerequisite enforcement on retention and course completion rates in English and math courses among underrepresented students. The report analyzed a subset of the more than 300 prerequisite-enforced courses offered by the SDCCD. The course selection criteria included: (1) all English and math courses with 30 or more enrollments for at least one underrepresented ethnic group; and (2) courses in other subject areas that were identified in a previous study as having a statistically significant change in course success rates. Data from selected courses were broken down by ethnic group and examined for changes in course enrollments and success rates, term retention rates, and term-to-term persistence rates. Immediate and long-term effects were assessed, using data from fall 1996 through fall 2001. In terms of the impact of prerequisite enforcement, all of the ethnic groups with the exception of Filipinos showed a decrease in term-to-term persistence rates across all multi-year comparisons. Furthermore, a majority of these decreases were found to be statistically relevant. The decrease was determined to be inconclusive, however, as it could be the result of an increase in the number of students achieving their educational objective. (Contains 67 tables and 2 charts.) (NB)

A Report on the Impact of Prerequisite Enforcement on Underrepresented Students

San Diego Community College District

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A Report on the Impact of Prerequisite Enforcement on Underrepresented Students (Response to Board Assignment 4.5)

Prepared by the Office of Institutional Research and Planning

San Diego Community College District

July 2002

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A Report on the Impact of Prerequisite Enforcement on Underrepresented Students (Response to Board Assignment 4.5)

Introduction

The results of Board Assignment 11.1 (Report on Prerequisite Enforcement: Impact Analysis) showed prerequisite enforcement to have an initial negative impact on course enrollment during the first semester of implementation. In addition, some courses had significant changes in successful course completion rates, yet there were no consistent or noticeable patterns. Under further discussion, the Board of Trustees requested further information addressing the impact of the enforcement policy on the retention of underrepresented students, specifically with respect to their enrollment and successful course completion rates in English and math courses.

Methodology

For the purpose of this study, retention was defined as term retention (students who complete the semester with at least 0.5 units regardless of grade). Successful course completion and term-to-term persistence rates were calculated for pre and post comparisons of prerequisite enforcement (e.g., fall 1996 vs. fall 1997). Similar to Board Assignment 11.1, we also examined the impact of the prerequisite enforcement on course enrollments. Furthermore, since underrepresented students were the primary focus of this study, the variables described above were also broken down by ethnic group. Each variable is described below.

Term Retention Rate: This rate was defined as the proportion of students who completed the semester (term) by receiving a grade (passing or non-passing) or credit in at least 0.5 units over the total number of students who started the semester.

Successful Course Completion Rate: Successful course completion rate was defined as the number of successful students (those receiving a letter grade of A, B, C, or Credit) divided by the total number of students enrolled (not including students who dropped or never attended). This methodology is consistent with the one used by the California State Chancellor's Office and the Research and Planning Group for California Community Colleges.

Term-to-Term Persistence Rate: This rate was defined as the proportion of students who persisted to the spring semester out of the total number enrolled in the previous fall semester.

Course Enrollment: Course enrollment data consisted of the number of students enrolled in a particular course excluding those who dropped or never attended¹.

¹ Data include duplicated counts of students, e.g., a student enrolled in 5 courses represents 5 enrollments.

Course Selection

In fall 1997, the district began enforcement of mandatory prerequisites for 100 transferable courses that had existing articulation agreements with four-year colleges and universities. Since 1997, the number of courses requiring prerequisites has increased to over 300. This report analyzed a subset of the current 300 plus prerequisite-enforced courses, primarily those that were included during the first term of prerequisite enforcement (fall 1997). In addition, courses not used in the previous report (e.g., basic skills level courses) were included in this report if they met the criteria listed below.

Course Selection Criteria

The courses included in this report were selected using the following criteria:

- All English and math courses with 30 or more enrollments for at least one underrepresented ethnic group.
- Courses in other subject areas (other than English and math) that were identified in the previous study as having a statistically significant change in course success rate.

All courses selected for this report are listed in Table A-1, Appendix A.

Analysis

Data from the selected courses were broken down by ethnic group and examined for changes in course enrollments and success rates, term retention rates, and term-to-term persistence rates. In addition, the English and math courses were organized by level, e.g., transfer level, associate degree level, and basic skills level. In general, the courses in one level are prerequisites to the courses in the next level (e.g., associate degree level courses are prerequisites to transfer level courses), thus the interactive effect of prerequisite enforcement between levels can be readily examined.

The immediate impact of prerequisite enforcement on underrepresented groups was assessed using fall 1996 as the baseline term to compare with the fall 1997 term (when prerequisite enforcement was first implemented). In order to assess the long-term impact of prerequisite enforcement, a longitudinal approach was utilized. This approach consisted of four multi-year comparisons made between fall 1996 and fall 1998 (two-year change), fall 1996 and fall 1999 (three-year change), fall 1996 and fall 2000 (four-year change), and fall 1996 and fall 2001 (five-year change).

The following types of analyses were conducted for both the immediate and long-term impact of prerequisite enforcement:

Impact on Course Enrollment: The extent to which prerequisite enforcement impacted the enrollment patterns of underrepresented students was assessed through examination of course enrollment distributions by ethnicity before and after the implementation of prerequisite

enforcement. In addition, enrollment changes were compared across course levels for the English and math courses. A statistical test (Chi-square analysis) was used to test the extent to which the ethnic distribution differed prior to and after prerequisite enforcement.

Impact on Successful Course Completion Rate: Course success rates were computed for each ethnic group. Similar to course enrollment, the impact of prerequisite enforcement on the successful course completion rates of underrepresented students was examined through inspection of course success rates by ethnicity, before and after the implementation of prerequisite enforcement. Comparisons were also made across course levels for the English and math courses. A statistical test (Z-test) was used to test the extent to which the course success rates differed prior to and after prerequisite enforcement.

Impact on Term Retention Rate: Term retention rates were computed for each ethnic group for: (1) all district students and (2) students who enrolled in at least one of the 1997 prerequisite-enforced English or math courses included in this report (see Table A-1 for a list of prerequisite-enforced courses). A statistical test (Z-test) was used to test the extent to which the computed term retention rates differed prior to and after prerequisite enforcement.

Impact on Term-to-Term Persistence Rate: Term-to-term persistence rates from the fall term to the spring term: (1) students who enrolled in at least one of the 1997 prerequisite-enforced English or math courses included in this report, and (2) students who successfully completed at least one of the 1997 prerequisite-enforced English or math courses included in this report. A statistical test (Z-test) was used to test the extent to which the computed term-to-term persistence rates differed prior to and after prerequisite enforcement. In comparing persistence rates prior to and after prerequisite enforcement, it was assumed that the proportions of students completing their educational goals or transferring remained constant from year to year and any observed changes in persistence rates would suggest an impact of prerequisite enforcement.

Results

The results are divided into two major sections. Section I describes the results of the immediate impact analyses, while the results of the long-term analyses are described in Section II.

SECTION I:

IMMEDIATE IMPACT OF PREREQUISITE ENFORCEMENT

Impact on Course Enrollments

Districtwide

Table A-2 in Appendix A shows the number of enrollments for all courses districtwide by ethnic group between fall 1996 and fall 1997. As can be seen in Table A-2, total enrollments increased from 108,034 to 109,955, a 2% increase. Examination of enrollment changes by ethnic group showed Asians as the only group with course enrollment decreases (-4% decrease). Latinos and

Filipinos had the highest course enrollment gains, +5% and +4% respectively, while African American and white enrollments increased almost 2% each. Overall, the data suggest that with the exception of Asian enrollments, total course enrollments (all district courses) for underrepresented groups rose slightly in fall 1997 and thus, appear not to have been adversely affected by the implementation of prerequisite enforcement.

English Courses

Table A-3 in Appendix A shows changes in course enrollment by ethnicity between fall 1996 and fall 1997 for transfer level, associate degree level, basic skills level, and non-native speaker level English courses. For total course enrollment, the data in Table A-3 show enrollment decreases in transfer level courses (English 101, -21%; English 105, -25%). By comparison, enrollments increased at the associate degree level (English 51, +18%) and basic skills level (English 50, +12%; English 55, +5%). In other words, from fall 1996 to fall 1997 (prerequisite enforcement) there was a general pattern in which enrollments shifted from higher level to lower level skills courses. This is not surprising since the effect of prerequisite enforcement is restricted enrollment, particularly in the higher level courses that require prerequisites. However, for lower level courses such as English 50 and English 55, which have no prerequisite requirements, enrollment increases would be expected. Enrollment changes in courses for non-native speakers were an exception to the general pattern described above. For example, total course enrollments increased in the higher level non-native English 10 course (+53%) and decreased in its prerequisite or lower level course, English 9 (-2%). One explanation for this exceptional pattern may be that prerequisite enforcement resulted in restrictions on English 50 enrollments for non-native speakers who subsequently had to enroll in English 10. This particular situation primarily affected Asians as described in the next paragraph.

Enrollment changes for each of the ethnic groups followed the same general pattern described in the previous paragraph. However, Asian was the only group to have enrollment decreases in basic skills level courses (English 50, -31%; English 55, -46%). In addition, Asian enrollments increased in a course for non-native speakers (English 10, +23%), a level below basic skills. Thus, in addition to a general enrollment shift from transfer level to associate degree level courses, Asian enrollments also shifted further down from basic skills level to non-native speaker-level courses.

Math Courses

Table A-4 in Appendix A shows changes in course enrollment by ethnicity between fall 1996 and fall 1997 for transfer level, associate degree level, and basic skills level math courses. As can be seen in Table A-4, total course enrollment in math courses showed the same general pattern as was found with the English courses, decreased enrollment at the transfer level and increased enrollment at the two levels below transfer (associate degree level, basic skills level). It should also be noted that this general pattern was described as an expected outcome of prerequisite enforcement. Only one transfer course, Math 104, did not fit the pattern because it showed an enrollment increase of 2%.

The course enrollment patterns for African Americans, Latinos, and whites were similar to the general pattern. In other words, enrollment patterns for these groups showed a shift from transfer level courses to lower level courses (associate degree and basic skills level). Filipino enrollments also followed the general pattern, but only in terms of an enrollment shift from transfer level to associate level courses. Although Asian enrollments increased in Math 32, Math 104 and Math 119, the course enrollment pattern for Asians did not shift as characterized by the general pattern described above, but rather, there was a general enrollment decrease in most of the math courses regardless of course level. This is consistent with the overall course enrollment decrease for the Asian group reported earlier (see Table A-2).

Other Courses

Biology 205 and Spanish 102 were the only two non-English and -math courses that met the criteria for inclusion in this report (a statistically significant change in course success rate and a sufficient number of enrollments). Table A-5 in Appendix A shows changes in course enrollment by ethnicity and total students between fall 1996 and fall 1997 for these two courses. The information provided in Table A-5 shows that total student enrollments in Biology 205 and Spanish 102 decreased by 19% and 14% respectively. In terms of ethnic enrollment changes, course enrollment decreases in Biology 205 were the largest for Asians (-47%), Filipinos (-44%), and African Americans (-43%). In comparison, Latinos and African Americans had the largest enrollment decreases in Spanish 102 (Latinos, -28%; African American, -21%).

Test of Statistical Significance

A statistical test of association (Chi-square analysis) was used to test the extent to which the distribution of ethnic course enrollments in fall 1996 (prior to prerequisite enforcement) differed from the distribution in fall 1997. As can be seen in Tables A-6, A-7, and A-8 in Appendix A, there were significant shifts in the ethnic enrollment distributions in English 50, English 55, English 101, and Math 119. Closer inspection of these changes show a relatively smaller percentage of Asians enrolled in English 50, English 55, and English 101. However, the percent of Asian enrollments increased in Math 119. In addition, the relative percent of African American enrollments decreased in English 101 and Math 119.

In summary, only four out of the nineteen courses assessed in this report were found to have significant changes with regard to enrollment distributions of ethnic groups after prerequisite enforcement. Asians and African Americans were the two primary groups contributing to the observed distributional changes. Overall, there was no major impact of prerequisite enforcement on the enrollment distributions of underrepresented groups for three-fourths of the courses analyzed in this report. Although, for the four courses described above, it is recommended that ethnic enrollment distributions be monitored.

Impact on Successful Course Completion

Districtwide

Successful course completion rates for total district courses from fall 1994 to fall 2000 were computed for each ethnic group and are provided in Chart B-1 in Appendix B. Overall, whites as a group, had the highest course success rates, followed by Asians, Filipinos, Native Americans, Latinos, and African Americans. All groups showed a slight decrease in course success rate when prerequisites were first enforced in fall 1997. However, the rates for all groups gradually increased from fall 1998 to fall 2000.

English Courses

The data in Table A-9 in Appendix A show changes in course success rates by ethnicity between fall 1996 and fall 1997 for transfer level, associate degree level, basic skills level, and non-native speaker level English courses. In general, between fall 1996 and fall 1997, total course success rates at all levels had either decreased or stayed relatively unchanged. Therefore, unlike course enrollment changes discussed in the previous section, there were no discernable patterns of course success rates with regard to the three levels of courses: basic skills, associate degree, and transfer.

Inspection of successful course completion rates by ethnic group showed that the rates for Latinos and African Americans had also decreased or remained unchanged regardless of course level. The only notable increases in course success rates were at the basic skills level (English 55) for Filipinos and Asians, associate degree level (English 51 and English 56) for whites, and transfer level (English 101) for Filipinos.

Math Courses

Table A-10 in Appendix A shows changes in course success rates by ethnicity between fall 1996 and fall 1997 for transfer level, associate degree level, and basic skills level math courses. As can be seen in Table A-10, from fall 1996 to fall 1997, total course success rates increased for all but one of the transfer level courses (Math 116). In contrast, course success rates decreased for courses at the associate degree and basic skills levels. In light of the math enrollment analysis in the previous section, this finding would suggest an inversed relationship in which decreased enrollments resulted in increased course success rates and vice versa, increased enrollments and decreased course success rates.

In terms of course success rates by ethnic group, Asians and Latinos showed a pattern similar to the general pattern described above. However, unlike the general pattern described in the previous paragraph, course success rates for African Americans, whites and Filipinos decreased in two or more transfer level courses; African American (Math 119 and Math 121); white (Math 104 and Math 116); Filipino (Math 104, Math 116, and Math 141).

Other Courses

Table A-11 in Appendix A shows changes in course success rates by ethnicity between fall 1996 and fall 1997 for Biology 205 and Spanish 102. The data provided in Table A-11 show that total course success rates for Biology 205 and Spanish 102 significantly increased between fall 1996 and fall 1997. Inspection of successful course completion rates by ethnic group showed that course success rates for Asians, Filipinos and whites had increased in both courses, while the rates for African Americans decreased in both courses. Course success rates for Latinos increased in Biology 205, but decreased in Spanish 102.

Test of Statistical Significance

The observed changes were tested for statistical significance. Results are provided in Tables A-9, A-10, and A-11 in Appendix A. The following observations were found to be statistically significant. Asians showed a decrease in course success rate in English 10 and an increase in course success rate in Math 119 and Math 141. Course success rates for African Americans decreased in English 50, English 55, and Math 32; however their success rates increased in Math 100 and Math 104. Success rates for Latinos decreased in English 51 but increased in Math 119 and Math 141. Although course success rates increased for Filipinos in English 55 and Math 119, the rates decreased in English 51, Math 116, and Math 141.

In conclusion, the data showed mixed results with no particular pattern either by course or by ethnic group. In other words, all of the underrepresented groups had significant increases and decreases in successful course completion rates in both English and math courses. Therefore, the extent to which prerequisite enforcement impacted the successful course completion rates of underrepresented groups was inconclusive.

Impact on Term Retention

Table A-12 in Appendix A shows the change in term retention rates for: (1) all district students and (2) students enrolled in at least one 1997 prerequisite-enforced English or math course. For the first group, the data in Table A-12 show term retention rates between 69% and 79% for both fall 1996 and fall 1997 semesters. By comparison, term retention rates for the students in the second group were slightly higher, ranging from 80% to over 90%. Thus, the data suggest a positive relationship between term retention and enrollment in prerequisite-enforced English and math courses.

Test of Statistical Significance

The observed changes in term retention rates between fall 1996 and fall 1997 for each ethnic group were tested for statistical significance. The differences in term retention rates for all group comparisons were found to be statistically non-significant. Thus, overall, there appears to be no relative impact of prerequisite enforcement on term retention rates.

Impact on Term-to-Term Persistence

Table A-13 in Appendix A shows the change in term-to-term persistence rates for: (1) students enrolled in at least one 1997 prerequisite-enforced English or math course and (2) students who successfully completed at least one 1997 prerequisite-enforced English or math course. As can be seen in Table A-13, the term-to-term persistence rates for students in the first group ranged from 76% to 86%. In contrast, the students in the second group had slightly higher term-to-term persistence rates, ranging from 83% to 92%. This data suggest that successful completion of the 1997 prerequisite-enforced English and math courses is associated with higher rates of term-to-term persistence.

Test of Statistical Significance

The observed changes in term-to-term persistence rates between fall 1996 and fall 1997 for each ethnic group were tested for statistical significance. The differences in term-to-term persistence rates for all group comparisons were found to be statistically non-significant. Therefore, the data show no relative impact of prerequisite enforcement on term-to-term persistence rates.

SECTION II:

LONG-TERM IMPACT OF PREREQUISITE ENFORCEMENT

Assessment of the long-term impact of prerequisite enforcement was based on four sets of comparative analyses. Similar to the immediate impact analysis described in the previous section, fall 1996 was used as the baseline term. However, instead of comparing the baseline term to a single subsequent term (e.g., fall 1997), four different subsequent terms were used (fall 1998, fall 1999, fall 2000, fall 2001). Thus, four sets of results were produced, which assessed the long-term impact of prerequisite enforcement in terms of a: (1) two-year change – fall 1996 vs. fall 1998 in Appendix C, (2) three-year change – fall 1996 vs. fall 1999 in Appendix D, (3) four-year change – fall 1996 vs. fall 2000 in Appendix E, and (4) five-year change – fall 1996 vs. fall 2001 in Appendix F. Each appendix contains a summary of the analysis along with the data tables. An overall summary of the multi-year comparative analyses is provided below.

Impact on Course Enrollments

Districtwide

When compared to the fall 1996 baseline year, the results of the multi-year comparisons show course enrollment increases from 1998 to fall 2001. In particular, Latinos consistently had the largest enrollment increases from year to year. In contrast, course enrollments for Asians decreased every year, while African American enrollments decreased from fall 1999 to fall 2001.

Chart B-2 in Appendix B shows total course enrollment² trends (fall 1994 to fall 2001) by ethnic group. As can be seen, Asians had enrollment decreases from fall 1997 to fall 2000 with a slight recovery in fall 2001. Course enrollments for African Americans began to drop in fall 1999 and continued through fall 2001. In addition, there was a drop in course enrollments for all groups in fall 2000, particularly for Filipinos. However, course enrollments increased the following year (fall 2001). Overall, with the exception of Asians and African Americans, the data suggest no long-term impact of prerequisite enforcement on total course enrollment for underrepresented groups. It is recommended that other factors affecting course enrollments be explored, particularly for Asians and African Americans.

English Courses

For each of the multi-year comparisons, total enrollments in the transfer level courses showed decreases, particularly for English 105. Course enrollments in the reading courses (English 55, English 56) also showed consistent enrollment decreases. In contrast, course enrollments in the writing courses (English 50, English 51) improved since the implementation of prerequisite enforcement.

In terms of enrollment patterns by ethnic group, the data show Asian and African American enrollments had decreased in most of the English courses. This finding is not surprising since total course enrollments for these two groups have decreased (see Chart B-2).

Math Courses

For total course enrollments, the results of the multi-year comparisons show no shift in enrollments from higher level courses to lower level courses as was found in Section I (immediate impact). In fact, the data show a reverse pattern, indicating decreased enrollments in the lower level courses and increased enrollments in the transfer level courses.

In terms of enrollments by ethnic groups, Latino enrollments showed consistent increases in most of the nine math courses analyzed (see Table A-1 in Appendix A for a list of the courses). In contrast, Asian and African American enrollments had decreased in many of the same math courses. As mentioned earlier, the observed enrollment decreases for Asians and African Americans would be expected given that both groups had decreases in total course enrollments between fall 1996 and fall 2001 (see Chart B-2).

Other Courses

The results of all multi-year comparisons show that course enrollments in Biology 205 and Spanish 102 have generally declined, particularly between fall 1996 and fall 2001. Furthermore, the decreases found in each of the multi-year comparisons were larger than the decrease found between fall 1996 and fall 1997. In terms of ethnic enrollment changes, all ethnic groups had enrollment decreases in both courses.

² This data is based on enrollment in all courses including those analyzed in this report.

Test of Statistical Significance

A statistical test of association (Chi-square analysis) was used to test the extent to which the distribution of course enrollments by ethnic group in fall 1996 differed from the distribution in each of the comparison years (fall 1998, fall 1999, fall 2000, fall 2001). The results showed significant shifts in the enrollment distributions by ethnicity in almost all of the courses. Closer inspection of these changes show a relatively smaller percentage of Asians and African Americans enrolled in most of the courses tested.

In summary, unlike the results of the immediate impact analysis, a majority of the courses assessed in each of the multi-year comparisons were found to have significant changes with regard to enrollment distributions of ethnic groups. As expected, Asians and African Americans were the two primary groups contributing to the observed distributional changes due to decreases in their total course enrollments (see Chart B-2).

Impact on Successful Course Completion

English Courses

In general, the results of the multi-year comparisons showed more courses with increased course success rates for all ethnic groups. However, only English 51 and English 101 had increased course success rates that were consistently significant, particularly for Asians, Latinos, and whites. Overall, similar to the findings in Section I (immediate impact), there were no identifiable patterns of change in course success rates by ethnic group.

Math Courses

Data from each of the multi-year comparisons revealed increases in course success rates for most of the transfer level courses. In contrast, the data for the basic skills level courses (Math 32, Math 35) generally showed a decrease in course success rate. In terms of course success rate by ethnic group, Asians, Latinos, and whites consistently had significant increased success rates in the transfer level courses. Overall, all ethnic groups had increased course success rates in at least five of the nine math courses reviewed.

Other Courses

Unlike the findings in Section I (immediate impact), the results from the multi-year comparisons showed a consistent increase in total course success rates for Biology 205, although, most of these increases were not statistically significant. With the exception of Filipinos, course success rates for Spanish 102 remained relatively unchanged. The course success rate for Filipinos in Spanish 102 was found to be significant in three out of the four multi-year comparisons.

In conclusion, the data from the multi-year comparisons showed no significant change in course success rates by ethnic group. However, of the few comparisons that were significant, most were in the positive direction (increased course success rates.) Furthermore, for eight of the nineteen courses analyzed in this addendum, significant increases in course success rates were found for

at least one or more ethnic group. Therefore, the long-term impact of prerequisite enforcement on the successful course completion rates of underrepresented groups appears to be moving in the positive direction.

Impact on Term Retention

Changes in term retention rates for: (1) all district students and (2) students enrolled in at least one 1997 prerequisite-enforced English or math course (analyzed in Section I) was computed for each of the multi-year comparisons. Similar to the results in Section I (immediate impact), term retention rates for the students in the second group were slightly higher. Compared to fall 1996, term retention rates have increased significantly for all ethnic groups. Thus, in terms of the long-term impact of prerequisite enforcement, the data suggest a positive relationship between term retention and enrollment in a prerequisite-enforced English or math course.

With the exception of Asians, comparisons of term retention rates between fall 1996 and each comparison year (fall 1998, fall 1999, fall 2000) by ethnic group revealed significant increases for all groups. Thus, overall, the results suggest a long-term positive impact of prerequisite enforcement on term retention rates.

Impact on Term-to-Term Persistence

For each multi-year comparison, the change in the term-to-term persistence rates was analyzed for: (1) students enrolled in at least one 1997 prerequisite-enforced English or math course and (2) students who successfully completed at least one 1997 prerequisite-enforced English or math course. Similar to the findings in Section I (immediate impact), the results of the multi-year comparisons showed term-to-term persistence rates were consistently higher for students in the second group. Thus, these data suggest that successful completion of a 1997 prerequisite-enforced English or math course is associated with higher rate of term-to-term persistence.

In terms of the impact of prerequisite enforcement, all of the ethnic groups, with the exception of Filipinos, showed a decrease in term-to-term persistence rate across all multi-year comparisons. Furthermore, a majority of these decreases were found to be statistically significant.

In summary, although the data show a long-term overall decrease in term-to-term persistence rate, this effect may also be the result of an increase in the number of students achieving their educational objective (e.g., obtaining an associate degree, transferring to a four-year university). Thus, these findings are inconclusive and speculative at best. Moreover, the results highlight the need for improved student tracking methods, particularly since students are not required to report their reasons for leaving. In an effort to address this need, the Office of Institutional Research and Planning is currently in the process of developing cohort tracking databases that are expected to be completed in fall 2002.

Summary

This report examined the immediate and long-term impact of prerequisite enforcement on underrepresented groups in terms of course enrollments, successful course completion rates, term retention, and term-to-term persistence. There was a particular focus on English and math courses at various levels (e.g., transfer, associate degree, basic skills).

Impact on Course Enrollments

Immediate impact analysis showed that with the exception of Asians, there was no significant change in the total (all district courses) course enrollments by ethnic group. Asian enrollment in all district courses showed a 4% decrease in fall 1997 compared to the previous year. In addition, the results of the multi-year analyses not only showed a continued decline in Asian course enrollments, but also a decline in African American course enrollments beginning in fall 1999. It was recommended that other factors affecting course enrollments be explored, particularly for Asians and African Americans.

For the courses examined in this report, the immediate impact analysis showed a general pattern characterized as an enrollment shift from the transfer level courses to the lower level courses. Examination of enrollment changes by ethnic group showed that enrollment patterns for African Americans, Latinos, and Filipinos followed this general pattern for both English and math courses, although Filipino enrollments decreased in basic skills level math courses as well. Unlike the general pattern, Asian enrollments decreased in the course levels below transfer for both English and math courses. Moreover, this is consistent with the total course enrollment decrease among Asians described above. In terms of the two non-English/math courses (Biology 205 and Spanish 102), all ethnic groups had noticeable course enrollment decreases in one or both courses. Results of a statistical test revealed that there was a significant change in Asian and African American enrollments for English 50, English 55, English 101, and Math 119. With the exception of these four courses, it was concluded that there was no overall impact of prerequisite enforcement on the course enrollments of underrepresented students. However, it was also recommended that these four courses be continuously monitored.

In terms of the long-term impact on course enrollments, a majority of the courses assessed in each of the multi-year comparisons were found to have significant changes in their ethnic enrollment distributions. It was concluded that Asians and African Americans were the primary reason for this effect since both groups had significant decreases in their total course enrollments.

Impact on Successful Course Completion

The immediate impact of prerequisite enforcement on successful course completion rates for underrepresented groups was also examined. The data showed that total (all district courses) course success rates had decreased for all ethnic groups during the first semester of prerequisite enforcement. However, the rates for all groups gradually increased in subsequent years.

Course success rates in English courses showed no distinguishable pattern. However, changes in the success rates for math courses showed a general pattern in which the rates increased in transfer level courses and decreased in lower level courses. Analysis of changes in course success rates by ethnic group showed that only Asians and Latinos had success rates similar to the general pattern. In contrast, successful course completion rates for African Americans and Filipinos had decreased in transfer level courses. The observed changes were tested for statistical significance. Significant changes were found for all ethnic groups in terms of course success rates, however no consistent pattern was noted. Therefore, the immediate impact of prerequisite enforcement on the course success rates of underrepresented groups was inconclusive.

With regard to the long-term impact of prerequisite enforcement, the multi-year comparisons showed no significant change in course success rates by ethnic group. However, of the few comparisons that were significant, a majority were in the positive direction (increased course success rates).

Impact on Term Retention

Term retention rates were also compared and statistically tested between fall 1996 and fall 1997 for each ethnic group. No significant immediate impact of prerequisite enforcement was found. However, long-term comparisons of term retention rates by ethnic group revealed significant increases for all groups with the exception of Asians.

Impact on Term-to-Term Persistence

Comparison of term-to-term persistence rates by ethnic group showed no immediate impact of prerequisite enforcement. In contrast, the results of the long-term impact analyses showed an overall decrease in term-to-term persistence. However, this result was considered inconclusive since this effect could have been the result of an increase in the number of students achieving their educational objective (e.g., obtaining an associate degree, transferring to a four-year university).

In conclusion, the office of Institutional Research and Planning will continue to monitor the effects of prerequisite enforcement, particularly with regard to other student outcomes such as persistence and performance.

Appendix A

Immediate Impact of Prerequisite Enforcement on Underrepresented Students

ONE-YEAR CHANGE – FALL 1996 vs. FALL 1997

Tables A-1 to A-13

Table A-1

Courses Included in Board Assignment 4.5

ENGLISH COURSES					
Course	Description	Enrollment		Change	% Change
		Fall 1996	Fall 1997		
Non-native Speaker					
English 9	College English Practice for Non-native Speakers	221	216	-5	-2.3%
English 10*	English Practice for Non-native Speakers	131	201	70	53.4%
Basic Skill Level					
English 50	English Review	701	786	85	12.1%
English 55	Reading Review	543	572	29	5.3%
Associate Degree Level					
English 51*	Basic Composition	1,372	1,616	244	17.8%
English 56	College Reading Study Skills	1,376	1,178	-198	-14.4%
Transfer Level					
English 101	Reading and Composition	3,224	2,532	-692	-21.5%
English 105	Composition and Literature	469	352	-117	-24.9%
MATH COURSES					
Course	Description	Enrollment		Change	% Change
		Fall 1996	Fall 1997		
Basic Skill Level					
Math 32	Fundamentals of Mathematics	463	527	64	13.8%
Math 35	Prealgebra	1,343	1,367	24	1.8%
Associate Degree Level					
Math 54	Elementary Algebra	2,324	2,400	76	3.3%
Math 100	Intermediate Algebra with Geometry	2,112	2,297	185	8.8%
Transfer Level					
Math 104	Trigonometry	543	580	37	6.8%
Math 116*	College and Matrix Algebra	563	493	-70	-12.4%
Math 119*	Elementary Statistics	1,033	916	-117	-11.3%
Math 121*	Basic Techniques of Calculus I	340	284	-56	-16.5%
Math 141*	Precalculus	355	344	-11	-3.1%
OTHER COURSES					
Course	Description	Enrollment		Change	% Change
		Fall 1996	Fall 1997		
Biology 205*	General Microbiology	230	187	-43	-18.7%
Spanish 102*	Second Course in Spanish	765	656	-109	-14.2%

* Had a significant change in course success rate between fall 1996 and fall 1997.

Note: Shaded courses are 1997 prerequisite-enforced courses.

Table A-2

**Change in Course Enrollments by Ethnic Group
All District Courses - Fall 1996 vs. Fall 1997**

Total Enrollments	
	All District Courses
Fall 1996	108,034
Fall 1997	109,955
Change	1,921
% Change	1.8%

Asian Enrollments	
	All District Courses
Fall 1996	15,159
Fall 1997	14,539
Change	-620
% Change	-4.1%

Latino Enrollments	
	All District Courses
Fall 1996	17,164
Fall 1997	18,076
Change	912
% Change	5.3%

African American	
	All District Courses
Fall 1996	13,722
Fall 1997	13,923
Change	201
% Change	1.5%

Filipino Enrollments	
	All District Courses
Fall 1996	7,222
Fall 1997	7,491
Change	269
% Change	3.7%

White Enrollments	
	All District Courses
Fall 1996	45,538
Fall 1997	46,212
Change	674
% Change	1.5%

Table A-3

**Change in Course Enrollments by Ethnic Group
English Courses - Fall 1996 vs. Fall 1997**

	Total Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	221	131	701	543	1372	1376	3224	469
Fall 1997	216	201	786	572	1616	1178	2532	352
Change	-5	70	85	29	244	-198	-692	-117
% Change	-2.3%	53.4%	12.1%	5.3%	17.8%	-14.4%	-21.5%	-24.9%
	Asian Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	136	91	159	141	212	209	436	36
Fall 1997	122	112	110	76	260	220	231	26
Change	-14	21	-49	-65	48	11	-205	-10
% Change	-10.3%	23.1%	-30.8%	-46.1%	22.6%	5.3%	-47.0%	-27.8%
	Latino Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	33	23	161	131	370	351	540	84
Fall 1997	51	46	195	173	439	307	400	65
Change	18	23	34	42	69	-44	-140	-19
% Change	54.5%	100.0%	21.1%	32.1%	18.6%	-12.5%	-25.9%	-22.6%
	African American Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	NA	NA	148	122	255	240	425	32
Fall 1997	NA	NA	190	131	262	192	260	17
Change	NA	NA	42	9	7	-48	-165	-15
% Change	NA	NA	28.4%	7.4%	2.7%	-20.0%	-38.8%	-46.9%
	Filipino Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	NA	NA	47	40	104	130	251	23
Fall 1997	NA	NA	61	42	124	99	210	15
Change	NA	NA	14	2	20	-31	-41	-8
% Change	NA	NA	29.8%	5.0%	19.2%	-23.8%	-16.3%	-34.8%
	White Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	NA	NA	147	81	348	344	1295	248
Fall 1997	NA	NA	175	109	407	274	1161	183
Change	NA	NA	28	28	59	-70	-134	-65
% Change	NA	NA	19.0%	34.6%	17.0%	-20.3%	-10.3%	-26.2%

Note: NA - Not applicable because enrollment numbers were too small.

Table A-4

**Change in Course Enrollments by Ethnic Group
Math Courses - Fall 1996 vs. Fall 1997**

	Total Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54	Math 100	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	463	1343	2324	2112	543	563	1033	340	355
Fall 1997	527	1367	2400	2297	580	493	916	284	344
Change	64	24	76	185	37	-70	-117	-56	-11
% Change	13.8%	1.8%	3.3%	8.8%	6.8%	-12.4%	-11.3%	-16.5%	-3.1%
	Asian Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54	Math 100	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	32	129	270	293	88	107	136	69	76
Fall 1997	44	107	230	275	107	94	171	56	75
Change	12	-22	-40	-18	19	-13	35	-13	-1
% Change	37.5%	-17.1%	-14.8%	-6.1%	21.6%	-12.1%	25.7%	-18.8%	-1.3%
	Latino Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54	Math 100	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	105	342	484	376	92	52	145	34	41
Fall 1997	117	381	515	424	77	57	134	29	39
Change	12	39	31	48	-15	5	-11	-5	-2
% Change	11.4%	11.4%	6.4%	12.8%	-16.3%	9.6%	-7.6%	-14.7%	-4.9%
	African American Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54	Math 100	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	172	290	371	239	36	45	107	22	31
Fall 1997	215	304	333	266	36	35	66	14	28
Change	43	14	-38	27	0	-10	-41	-8	-3
% Change	25.0%	4.8%	-10.2%	11.3%	0.0%	-22.2%	-38.3%	-36.4%	-9.7%
	Filipino Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54	Math 100	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	24	75	144	185	69	42	92	28	29
Fall 1997	23	56	163	202	73	37	88	22	32
Change	-1	-19	19	17	4	-5	-4	-6	3
% Change	-4.2%	-25.3%	13.2%	9.2%	5.8%	-11.9%	-4.3%	-21.4%	10.3%
	White Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54	Math 100	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	100	416	875	848	225	273	471	157	141
Fall 1997	100	413	945	931	232	228	391	125	133
Change	0	-3	70	83	7	-45	-80	-32	-8
% Change	0.0%	-0.7%	8.0%	9.8%	3.1%	-16.5%	-17.0%	-20.4%	-5.7%

Table A-5

**Change in Course Enrollments by Ethnic Group
Other Courses - Fall 1996 vs. Fall 1997**

Total Enrollments		
	Biology 205	Spanish 102
Fall 1996	230	765
Fall 1997	187	656
Change	-43	-109
% Change	-18.7%	-14.2%
Asian Enrollments		
	Biology 205	Spanish 102
Fall 1996	36	63
Fall 1997	19	65
Change	-17	2
% Change	-47.2%	3.2%
Latino Enrollments		
	Biology 205	Spanish 102
Fall 1996	19	144
Fall 1997	20	103
Change	1	-41
% Change	5.3%	-28.5%
African American Enrollments		
	Biology 205	Spanish 102
Fall 1996	21	67
Fall 1997	12	53
Change	-9	-14
% Change	-42.9%	-20.9%
Filipino Enrollments		
	Biology 205	Spanish 102
Fall 1996	39	52
Fall 1997	22	46
Change	-17	-6
% Change	-43.6%	-11.5%
White Enrollments		
	Biology 205	Spanish 102
Fall 1996	100	365
Fall 1997	94	329
Change	-6	-36
% Change	-6.0%	-9.9%

Table A-6

Course Enrollment
Change in Ethnic Group Distributions
English Courses - Fall 1996 vs. Fall 1997

		Native American	Asian	African American	White	Latino	Filipino	Other	Decline	Total N
Non-native Speaker	English 9	Fall 1996	0.0%	61.5%	3.6%	10.4%	14.9%	2.7%	5.0%	1.8%
		Fall 1997	0.0%	56.5%	3.7%	12.5%	23.6%	0.9%	2.3%	0.5%
		Change in % Points	0.0	-5.0	0.1	2.1	8.7	-1.8	-2.7	-1.3
		% Change	0.0	-8.1	2.8	20.2	58.4	-66.7	-54.0	-72.2
	English 10	Fall 1996	0.0%	69.5%	0.8%	6.9%	17.6%	1.5%	3.1%	0.8%
		Fall 1997	0.0%	55.7%	2.0%	9.0%	22.9%	5.0%	3.0%	2.5%
		Change in % Points	0.0	-13.8	1.2	2.1	5.3	3.5	-0.1	1.7
		% Change	0.0	-19.9	150.0	30.4	30.1	233.3	-3.2	212.5
Basic Skills Level	English 50**	Fall 1996	1.4%	22.7%	21.1%	21.0%	23.0%	6.7%	2.1%	2.0%
		Fall 1997	1.0%	14.0%	24.2%	22.3%	24.8%	7.8%	3.4%	2.5%
		Change in % Points	-0.4	-8.7	3.1	1.3	1.8	1.1	1.3	0.5
		% Change	-28.6	-38.3	14.7	6.2	7.8	16.4	61.9	25.0
	English 55***	Fall 1996	1.1%	26.0%	22.5%	14.9%	24.1%	7.4%	3.1%	0.9%
		Fall 1997	0.2%	13.3%	22.9%	19.1%	30.2%	7.3%	4.4%	2.6%
		Change in % Points	-0.9	-12.7	0.4	4.2	6.1	-0.1	1.3	1.7
		% Change	-81.8	-48.8	1.8	28.2	25.3	-1.4	41.9	188.9
Associate Degree Level	English 51	Fall 1996	1.2%	15.5%	18.6%	25.4%	27.0%	7.6%	3.1%	1.7%
		Fall 1997	1.2%	16.1%	16.2%	25.2%	27.2%	7.7%	3.1%	3.3%
		Change in % Points	0.0	0.6	-2.4	-0.2	0.2	0.1	0.0	1.6
		% Change	0.0	3.9	-12.9	-0.8	0.7	1.3	0.0	94.1
	English 56	Fall 1996	1.7%	15.2%	17.4%	25.0%	25.5%	9.4%	3.6%	2.0%
		Fall 1997	1.0%	18.7%	16.3%	23.3%	26.1%	8.4%	3.6%	2.7%
		Change in % Points	-0.7	3.5	-1.1	-1.7	0.6	-1.0	0.0	0.7
		% Change	-41.2	23.0	-6.3	-6.8	2.4	-10.6	0.0	35.0
Transfer Level	English 101***	Fall 1996	1.4%	13.5%	13.2%	40.2%	16.7%	7.8%	3.2%	4.0%
		Fall 1997	1.5%	9.1%	10.3%	45.9%	15.8%	8.3%	3.3%	5.9%
		Change in % Points	0.1	-4.4	-2.9	5.7	-0.9	0.5	0.1	1.9
		% Change	7.1	-32.6	-22.0	14.2	-5.4	6.4	3.1	47.5
	English 105	Fall 1996	1.7%	7.7%	6.8%	52.9%	17.9%	4.9%	1.9%	6.2%
		Fall 1997	2.0%	7.4%	4.8%	52.0%	18.5%	4.3%	2.6%	8.5%
		Change in % Points	0.3	-0.3	-2.0	-0.9	0.6	-0.6	0.7	2.3
		% Change	17.6	-3.9	-29.4	-1.7	3.4	-12.2	36.8	37.1

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Note: Shaded rows reflect significant change.

Appendix A-6

Table A-7.1

Course Enrollment
Change in Ethnic Group Distributions
Math Courses (Basic Skills and Associate Degree Levels) - Fall 1996 vs. Fall 1997

Math Courses (Basic Skills and Associate Degree Levels) - Fall 1996 vs. Fall 1997												
			Native American	Asian	African American	White	Latino	Filipino	Other	Decline	Total N	
Basic Skills Level	Math 32	Fall 1996	1.1%	6.9%	37.1%	21.6%	22.7%	5.2%	3.5%	1.9%	463	
		Fall 1997	0.6%	8.3%	40.8%	19.0%	22.2%	4.4%	2.8%	1.9%	527	
		Change in % Points	-0.5	1.4	3.7	-2.6	-0.5	-0.8	-0.7	0.0		
		% Change	0.0	20.3	10.0	-12.0	-2.2	-15.4	-20.0	0.0		
	Math 35	Fall 1996	1.5%	9.6%	21.6%	31.0%	25.5%	5.6%	3.2%	2.1%	1,343	
		Fall 1997	1.4%	7.8%	22.2%	30.2%	27.9%	4.1%	3.4%	2.9%	1,367	
Associate Degree Level	Math 54	Change in % Points	-0.1	-1.8	0.6	-0.8	2.4	-1.5	0.2	0.8		
		% Change	0.0	-18.8	2.8	-2.6	9.4	-26.8	6.3	38.1		
	Math 100	Fall 1996	1.2%	11.6%	16.0%	37.7%	20.8%	6.2%	3.1%	3.5%	2,324	
		Fall 1997	1.3%	9.6%	13.9%	39.4%	21.5%	6.8%	3.3%	4.3%	2,400	
			Change in % Points	0.1	-2.0	-2.1	1.7	0.7	0.6	0.2	0.8	
			% Change	8.3	-17.2	-13.1	4.5	3.4	9.7	6.5	22.9	
			Fall 1996	1.4%	13.9%	11.3%	40.2%	17.8%	8.8%	2.3%	4.4%	2,112
			Fall 1997	1.2%	12.0%	11.6%	40.5%	18.5%	8.8%	3.4%	4.0%	2,297
		Change in % Points	-0.2	-1.9	0.3	0.3	0.7	0.0	1.1	-0.4		
		% Change	-14.3	-13.7	2.7	0.7	3.9	0.0	47.8	-9.1		

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Note: Shaded rows reflect significant changes.

Appendix A-7.1

Table 7.2

**Course Enrollment
Change in Ethnic Group Distributions**

		Native American	Asian	African American	White	Latino	Filipino	Other	Decline	Total N
Transfer Level	Math 104									
	Fall 1996	0.6%	16.2%	6.6%	41.4%	16.9%	12.7%	2.4%	3.1%	543
	Fall 1997	1.0%	18.4%	6.2%	40.0%	13.3%	12.6%	2.6%	5.9%	580
	Change in % Points	0.4	2.2	-0.4	-1.4	-3.6	-0.1	0.2	2.8	
	Math 116									
	% Change	0.0	13.6	-6.1	-3.4	-21.3	-0.8	8.3	90.3	
	Fall 1996	2.1%	19.0%	8.0%	48.5%	9.2%	7.5%	3.2%	2.5%	563
	Fall 1997	1.2%	19.1%	7.1%	46.2%	11.6%	7.5%	3.9%	3.4%	493
	Math 119									
	Change in % Points	-0.9	0.1	-0.9	-2.3	2.4	0.0	0.7	0.9	
	% Change	0.0	0.5	-11.3	-4.7	26.1	0.0	21.9	36.0	
	Fall 1996	1.3%	13.2%	10.4%	45.6%	14.0%	8.9%	2.6%	4.1%	1,033
	Math 121									
	Fall 1997	0.8%	18.7%	7.2%	42.7%	14.6%	9.6%	2.4%	4.0%	916
	Change in % Points	-0.5	5.5	-3.2	-2.9	0.6	0.7	-0.2	-0.1	
	% Change	0.0	41.7	-30.8	-6.4	4.3	7.9	-7.7	-2.4	
	Math 141									
	Fall 1996	1.2%	20.3%	6.5%	46.2%	10.0%	8.2%	3.8%	3.8%	340
	Fall 1997	2.5%	19.7%	4.9%	44.0%	10.2%	7.7%	4.2%	6.7%	284
	Change in % Points	1.3	-0.6	-1.6	-2.2	0.2	-0.5	0.4	2.9	
	Math 141									
	% Change	108.3	-3.0	-24.6	-4.8	2.0	-6.1	10.5	76.3	
	Fall 1996	1.1%	21.4%	8.7%	39.7%	11.5%	8.2%	3.4%	5.9%	355
	Fall 1997	0.9%	21.8%	8.1%	38.7%	11.3%	9.3%	4.1%	5.8%	344
	Change in % Points	-0.2	0.4	-0.6	-1.0	-0.2	1.1	0.7	-0.1	
	% Change	-18.2	1.9	-6.9	-2.5	-1.7	13.4	20.6	-1.7	

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Note: Shaded rows reflect significant changes.

Appendix A-7.2

Table A-8

Course Enrollment
Change in Ethnic Group Distributions
Other Courses - Fall 1996 vs. Fall 1997

		Native American	Asian	African American	White	Latino	Filipino	Other	Decline	Total N
Biology 205	Fall 1996	1.7%	15.7%	9.1%	43.5%	8.3%	17.0%	1.7%	3.0%	230
	Fall 1997	0.5%	10.2%	6.4%	50.3%	10.7%	11.8%	4.3%	5.9%	187
	Change in % Points	-1.2	-5.5	-2.7	6.8	2.4	-5.2	2.6	2.9	
Spanish 102	% Change	0.0	-35.0	-29.7	15.6	28.9	-30.6	152.9	96.7	
	Fall 1996	1.4%	8.2%	8.8%	47.7%	18.8%	6.8%	2.9%	5.4%	765
	Fall 1997	1.8%	9.9%	8.1%	50.2%	15.7%	7.0%	1.8%	5.5%	656
	Change in % Points	0.4	1.7	-0.7	2.5	-3.1	0.2	-1.1	0.1	
	% Change	0.0	20.7	-8.0	5.2	-16.5	2.9	-37.9	1.9	

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table A-9

English Courses - Fall 1996 vs. Fall 1997

	Total Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	59.3%	64.1%	51.4%	52.9%	42.8%	62.1%	53.2%	54.8%
Fall 1997	56.5%	41.8%	45.7%	51.9%	39.2%	59.3%	53.4%	50.0%
Change	-2.8%	-22.3%	-5.7%	-1.0%	-3.6%	-2.8%	0.2%	-4.8%
	Asian Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10**	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	62.5%	64.8%	50.9%	56.0%	34.0%	67.0%	58.9%	50.0%
Fall 1997	57.4%	42.9%	47.3%	63.2%	31.9%	60.0%	58.9%	38.5%
Change	-5.1%	-21.9%	-3.6%	7.2%	-2.1%	-7.0%	0.0%	-11.5%
	Latino Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51*	English 56	English 101	English 105
Fall 1996	57.6%	60.9%	47.2%	51.9%	42.2%	59.8%	47.0%	44.0%
Fall 1997	58.8%	43.5%	43.6%	50.9%	33.5%	54.7%	43.8%	35.4%
Change	1.2%	-17.4%	-3.6%	-1.0%	-8.7%	-5.1%	-3.2%	-8.6%
	African American Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50*	English 55*	English 51	English 56	English 101	English 105
Fall 1996	NA	NA	50.0%	57.4%	38.8%	59.2%	41.2%	56.3%
Fall 1997	NA	NA	38.4%	44.3%	33.2%	53.1%	41.5%	52.9%
Change	NA	NA	-11.6%	-13.1%	-5.6%	-6.1%	0.3%	-3.4%
	Filipino Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55*	English 51*	English 56	English 101	English 105
Fall 1996	NA	NA	61.7%	45.0%	52.9%	60.0%	51.4%	56.5%
Fall 1997	NA	NA	44.3%	71.4%	38.7%	58.6%	45.7%	60.0%
Change	NA	NA	-17.4%	26.4%	-14.2%	-1.4%	-5.7%	3.5%
	White Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	NA	NA	55.8%	50.6%	46.3%	62.5%	59.5%	58.9%
Fall 1997	NA	NA	53.1%	50.5%	51.4%	66.1%	59.8%	55.7%
Change	NA	NA	-2.7%	-0.1%	5.1%	3.6%	0.3%	-3.2%

Note 1: Shaded columns reflect significant changes.

Note 2: NA - Not applicable because enrollment numbers were too small.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table A-9

English Courses - Fall 1996 vs. Fall 1997

	Total Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	59.3%	64.1%	51.4%	52.9%	42.8%	62.1%	53.2%	54.8%
Fall 1997	56.5%	41.8%	45.7%	51.9%	39.2%	59.3%	53.4%	50.0%
Change	-2.8%	-22.3%	-5.7%	-1.0%	-3.6%	-2.8%	0.2%	-4.8%
	Asian Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10**	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	62.5%	64.8%	50.9%	56.0%	34.0%	67.0%	58.9%	50.0%
Fall 1997	57.4%	42.9%	47.3%	63.2%	31.9%	60.0%	58.9%	38.5%
Change	-5.1%	-21.9%	-3.6%	7.2%	-2.1%	-7.0%	0.0%	-11.5%
	Latino Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51*	English 56	English 101	English 105
Fall 1996	57.6%	60.9%	47.2%	51.9%	42.2%	59.8%	47.0%	44.0%
Fall 1997	58.8%	43.5%	43.6%	50.9%	33.5%	54.7%	43.8%	35.4%
Change	1.2%	-17.4%	-3.6%	-1.0%	-8.7%	-5.1%	-3.2%	-8.6%
	African American Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50*	English 55*	English 51	English 56	English 101	English 105
Fall 1996	NA	NA	50.0%	57.4%	38.8%	59.2%	41.2%	56.3%
Fall 1997	NA	NA	38.4%	44.3%	33.2%	53.1%	41.5%	52.9%
Change	NA	NA	-11.6%	-13.1%	-5.6%	-6.1%	0.3%	-3.4%
	Filipino Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55*	English 51*	English 56	English 101	English 105
Fall 1996	NA	NA	61.7%	45.0%	52.9%	60.0%	51.4%	56.5%
Fall 1997	NA	NA	44.3%	71.4%	38.7%	58.6%	45.7%	60.0%
Change	NA	NA	-17.4%	26.4%	-14.2%	-1.4%	-5.7%	3.5%
	White Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	NA	NA	55.8%	50.6%	46.3%	62.5%	59.5%	58.9%
Fall 1997	NA	NA	53.1%	50.5%	51.4%	66.1%	59.8%	55.7%
Change	NA	NA	-2.7%	-0.1%	5.1%	3.6%	0.3%	-3.2%

Note 1: Shaded columns reflect significant changes.

Note 2: NA - Not applicable because enrollment numbers were too small.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table A-10

Math Courses - Fall 1996 vs. Fall 1997

	Total Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54	Math 100	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	50.3%	54.7%	47.5%	44.7%	46.2%	55.8%	50.9%	55.9%	38.9%
Fall 1997	46.9%	49.6%	44.7%	42.6%	48.3%	48.1%	61.6%	65.5%	53.5%
Change	-3.4%	-5.1%	-2.8%	-2.1%	2.1%	-7.7%	10.7%	9.6%	14.6%
	Asian Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54	Math 100	Math 104	Math 116	Math 119**	Math 121	Math 141*
Fall 1996	71.9%	65.9%	62.6%	53.6%	48.9%	58.9%	50.0%	56.5%	35.5%
Fall 1997	65.9%	62.6%	59.1%	53.5%	51.4%	63.8%	69.6%	73.2%	56.0%
Change	-6.0%	-3.3%	-3.5%	-0.1%	2.5%	4.9%	19.6%	16.7%	20.5%
	Latino Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54	Math 100	Math 104	Math 116	Math 119*	Math 121	Math 141***
Fall 1996	47.6%	51.5%	41.7%	39.4%	45.7%	42.3%	44.1%	32.4%	24.4%
Fall 1997	53.0%	46.7%	41.2%	31.6%	46.8%	45.6%	59.0%	55.2%	61.5%
Change	5.4%	-4.8%	-0.5%	-7.8%	1.1%	3.3%	14.9%	22.8%	37.1%
	African American Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32**	Math 35	Math 54	Math 100*	Math 104**	Math 116	Math 119	Math 121	Math 141
Fall 1996	48.8%	42.8%	33.4%	27.6%	22.2%	35.6%	43.9%	45.5%	25.8%
Fall 1997	32.6%	35.9%	31.8%	33.8%	55.6%	42.9%	39.4%	28.6%	42.9%
Change	-16.2%	-6.9%	-1.6%	6.2%	33.4%	7.3%	-4.5%	-16.9%	17.1%
	Filipino Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54	Math 100	Math 104	Math 116*	Math 119*	Math 121	Math 141*
Fall 1996	45.8%	69.3%	44.4%	50.3%	44.9%	59.5%	42.4%	50.0%	65.5%
Fall 1997	52.2%	58.9%	46.0%	43.6%	41.1%	32.4%	59.1%	68.2%	34.4%
Change	6.4%	-10.4%	1.6%	-6.7%	-3.8%	-27.1%	16.7%	18.2%	-31.1%
	White Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32*	Math 35	Math 54	Math 100	Math 104	Math 116**	Math 119**	Math 121	Math 141
Fall 1996	46.0%	59.4%	52.9%	48.2%	50.7%	59.7%	55.2%	65.6%	41.1%
Fall 1997	62.0%	56.9%	49.0%	47.7%	47.0%	47.4%	64.5%	70.4%	52.6%
Change	16.0%	-2.5%	-3.9%	-0.5%	-3.7%	-12.3%	9.3%	4.8%	11.5%

Note: Shaded columns reflect significant changes.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table A-11

Other Courses - Fall 1996 vs. Fall 1997

Total Course Success Rates		
	Biology 205	Spanish 102
Fall 1996	71.3%	68.1%
Fall 1997	84.5%	73.6%
Change	13.2%	5.5%
Asian Course Success Rates		
	Biology 205	Spanish 102
Fall 1996	66.7%	71.4%
Fall 1997	78.9%	84.6%
Change	12.2%	13.2%
Latino Course Success Rates		
	Biology 205	Spanish 102
Fall 1996	68.4%	77.8%
Fall 1997	75.0%	68.0%
Change	6.6%	-9.8%
African American Course Success Rates		
	Biology 205	Spanish 102
Fall 1996	61.9%	67.2%
Fall 1997	58.3%	52.8%
Change	-3.6%	-14.4%
Filipino Course Success Rates		
	Biology 205	Spanish 102*
Fall 1996	74.4%	57.7%
Fall 1997	90.9%	80.4%
Change	16.5%	22.7%
White Course Success Rates		
	Biology 205***	Spanish 102**
Fall 1996	71.0%	66.0%
Fall 1997	92.6%	76.0%
Change	21.6%	10.0%

Note: Shaded columns reflect significant changes.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table 12

**Change in Term Retention Rate by Ethnic Group
Fall 1996 vs. Fall 1997**

Total Term Retention Rates		
	All District Students	Students Enrolled in Prerequisite-enforced English or Math Courses ¹
Fall 1996	73.8%	86.8%
Fall 1997	74.4%	86.5%
Change	0.6%	-0.3%
Asian Term Retention Rates		
	All District Asian Students	Students Enrolled in Prerequisite-enforced English or Math Courses ¹
Fall 1996	77.8%	90.7%
Fall 1997	77.8%	90.8%
Change	0.0%	0.1%
Latino Term Retention Rates		
	All District Latino Students	Students Enrolled in Prerequisite-enforced English or Math Courses ¹
Fall 1996	74.6%	85.5%
Fall 1997	74.2%	85.4%
Change	-0.4%	-0.1%
African American Term Retention Rates		
	All District African American Students	Students Enrolled in Prerequisite-enforced English or Math Courses ¹
Fall 1996	69.4%	83.2%
Fall 1997	69.2%	81.3%
Change	-0.2%	-1.9%
Filipino Term Retention Rates		
	All District Filipino Students	Students Enrolled in Prerequisite-enforced English or Math Courses ¹
Fall 1996	76.3%	89.4%
Fall 1997	74.6%	86.5%
Change	-1.7%	-2.9%
White Term Retention Rates		
	All District White Students	Students Enrolled in Prerequisite-enforced English or Math Courses ¹
Fall 1996	73.7%	86.7%
Fall 1997	75.0%	86.8%
Change	1.3%	0.1%

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

1. Unduplicated count of students enrolled in at least one of the

Note: Shaded columns reflect significant changes.

Table A-13

**Change in Term-to-Term Persistence Rate by Ethnic Group
Students Enrolled in English and Math - Fall 1996 vs. Fall 1997**

Total Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses ²
Fall 1996 to Spring 1997	79.6%	87.1%
Fall 1997 to Spring 1998	78.7%	86.5%
Change	-0.9%	-0.6%
Asian Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses ²
Fall 1996 to Spring 1997	86.1%	91.3%
Fall 1997 to Spring 1998	84.8%	89.3%
Change	-1.3%	-2.0%
Latino Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses ²
Fall 1996 to Spring 1997	79.7%	87.6%
Fall 1997 to Spring 1998	78.4%	87.6%
Change	-1.3%	0.0%
African American Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses ²
Fall 1996 to Spring 1997	79.9%	89.4%
Fall 1997 to Spring 1998	80.6%	91.6%
Change	0.7%	2.2%
Filipino Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses ²
Fall 1996 to Spring 1997	79.2%	83.4%
Fall 1997 to Spring 1998	77.6%	82.8%
Change	-1.6%	-0.6%
White Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses ²
Fall 1996 to Spring 1997	76.9%	85.3%
Fall 1997 to Spring 1998	76.4%	84.1%
Change	-0.5%	-1.2%

1. Unduplicated count of students enrolled in at least one of the 1997 prerequisite-enforced English or math courses examined in this report.

2. Unduplicated count of students successfully completing at least one of the 1997 prerequisite-enforced English or math courses examined in this report.

Note: Shaded columns reflect significant changes.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Appendix B

Impact of Prerequisite Enforcement on Underrepresented Students

Chart B-1 Successful Course Completion Rates by Ethnicity (Fall 1994 to Fall 2000)

Chart B-2 Total Course Enrollments by Ethnicity (Fall 1994 to Fall 2001)

Chart B-1

Successful Course Completion Rates by Ethnicity (Fall 1994 to Fall 2000)

TOTAL DISTRICT COURSES

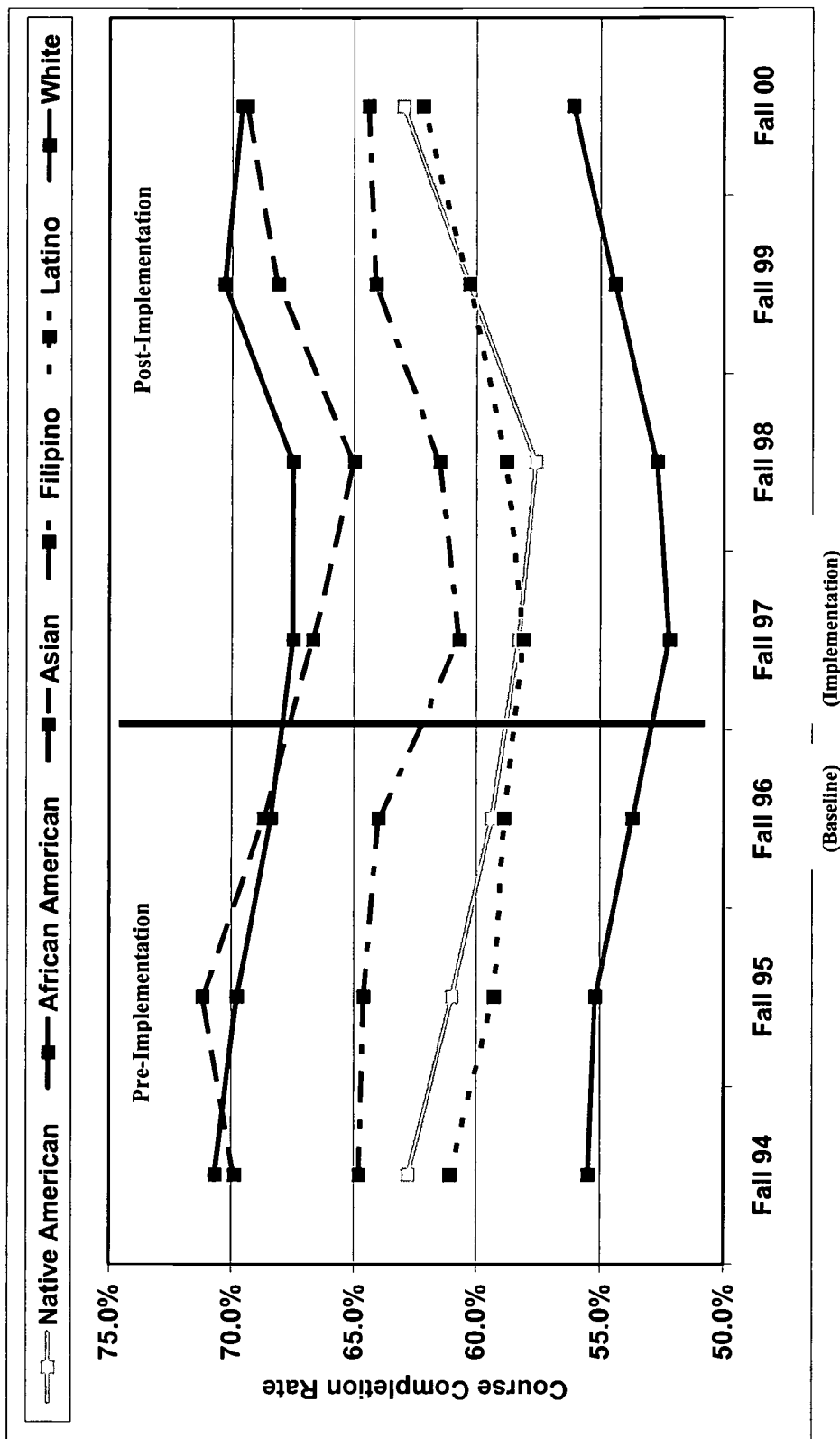
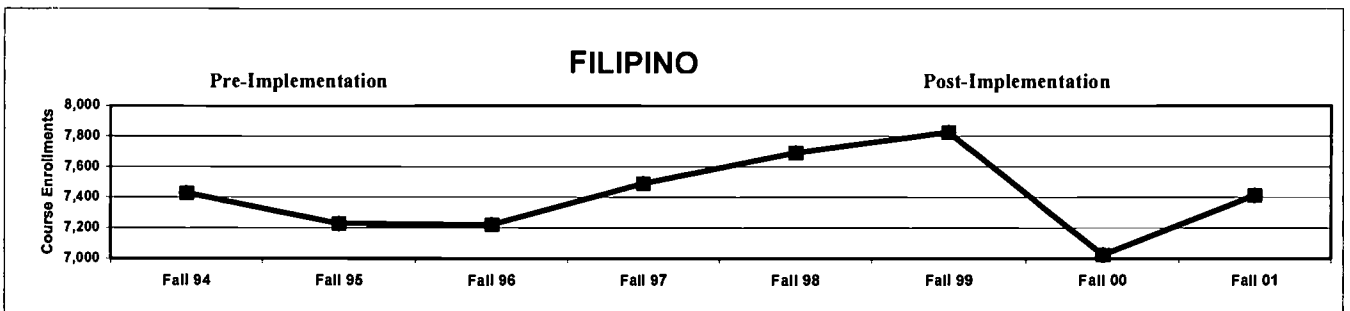
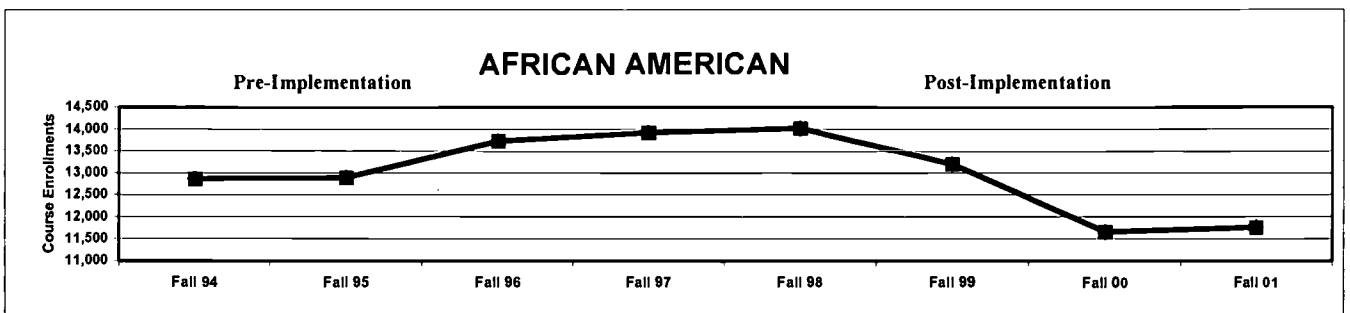
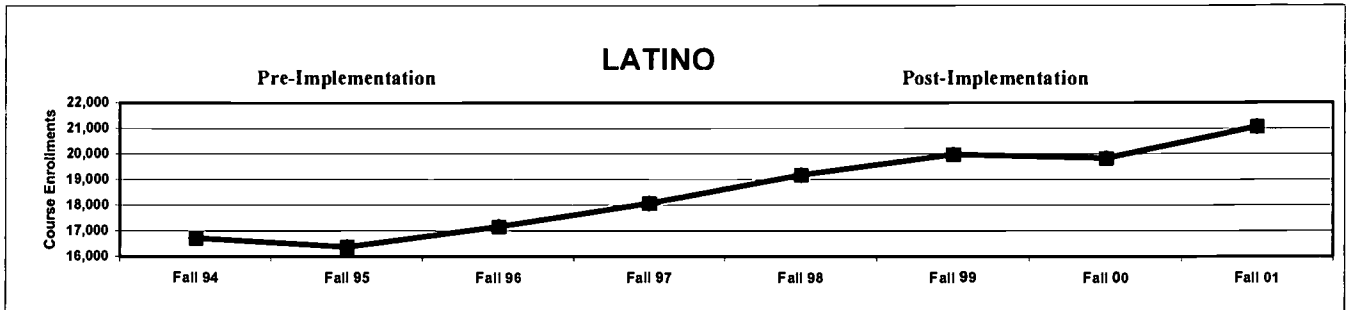


Chart B-2
Total Course Enrollments by Ethnicity (Fall 1994 to Fall 2001)

Pre-Implementation ASIAN Post-Implementation



Pre-Implementation WHITE Post-Implementation

Appendix C

Long-term Impact of Prerequisite Enforcement on Underrepresented Students

TWO-YEAR CHANGE – FALL 1996 vs. FALL 1998

Tables C-1 to C-13

Table C-1

Long-term Impact of Prerequisite Enforcement on Underrepresented Students

TWO-YEAR CHANGE – FALL 1996 vs. FALL 1998

Impact on Course Enrollments

Districtwide – (Table C-2)

- From fall 1996 to fall 1998, total course enrollments grew from 108,034 to 112,859, a 4% increase.
- Latinos had the largest enrollment gains (+11%), followed by Filipinos (+6%), whites (+4%) and African Americans (+2%).
- Asians were the only group with a noticeable decrease in course enrollments (-4%).

English Courses – (Table C-3)

- Total enrollments in the transfer level courses showed a decrease since fall 1997, particularly for English 105.
- Enrollments decreased in the reading courses (English 55, English 56), but increased in the writing courses (English 50, English 51).
- All ethnic groups had noticeable enrollment decreases in the transfer level courses. Filipino enrollments in English 105 was the only exception.
- Asian enrollments also decreased in all but two English courses.

Math Courses – (Table C-4)

- Total enrollments were generally up. Only three courses showed decreases in total course enrollments, Math 35, (-16%); Math 119, (-4%); and Math 121, (-14%).
- African American enrollments decreased in all but two of the math courses listed.
- Enrollment changes for Asians, Latinos, Filipinos and whites were mixed.

Other Courses – (Table C-5)

- Total student enrollments in Biology 205 and Spanish 102 decreased by 19% and 6% respectively.
- Course enrollment decreases in Biology 205 were the largest for Asians, (-42%); Filipinos, (-36%); and African Americans, (-24%).
- In contrast, Latino enrollments in Biology 205 increased by 37%.

- For Spanish 102, Latinos, Asians, and Filipinos had noticeable enrollment decreases (Latinos, -23%; Asians, -19%; Filipinos, -17%).

Test of Statistical Significance – (Table C-6, Table C-7, Table C-8)

A statistical test of association (Chi-square analysis) was used to test the extent to which the distribution of ethnic course enrollments in fall 1996 differed from the distribution in fall 1998.

- Seven out of the nineteen courses assessed in this report had significant changes with regard to enrollment distributions by ethnic group.
- In particular, Asians and African Americans were the two primary groups contributing to the observed distributional changes.
- Of the courses with significant changes in ethnic distributions, the proportion of Asian enrollments decreased in English 9, English 55, English 101, Math 100, and Math 116.
- The proportion of African American enrollments also decreased considerably in English 51, English 101, and Math 116.

Impact on Successful Course Completion

English Courses – (Table C-9)

- With the exception of three observations, between fall 1996 and fall 1998, there were no notable changes in course success rates.
- There were two significant increases in course success rates: Asians, (English 51) and whites, (English 55).
- Only Filipinos in English 105 had a significant decrease in course success rate.

Math Courses – (Table C-10)

- Total course success rates increased for all but two of the transfer level courses (Math 104, Math 116).
- Course success rates decreased for all four courses at the associate degree and basic skills levels.
- Asians, Latinos, and Filipinos had significant decreases in course success rates (Asians, Math 32, Math 54; Latinos, Math 54, Math 104; Filipinos, Math 35).
- Groups with statistically significant increases in course success rates included Asians, (Math 119, Math 121); Latinos, (Math 141); and whites (Math 119, Math 141).

Other Courses – (Table C-11)

- The data provided in Table C-11 show an increase in total course success rates for both Biology 205 and Spanish 102.
- Course success rate increases for Filipinos in Spanish 102 was the only observation found to be statistically significant.

Impact on Term Retention

Table C-12 shows the change in term retention rates between fall 1996 and fall 1998 for: (1) all district students and (2) students enrolled in at least one 1997 prerequisite-enforced English or math course.

- Overall, between fall 1996 and fall 1998, the data in Table C-12 show moderate increases in term retention rate.
- Term retention rates for the students in the first group ranged from 69% to 79%, while the rates for the second group were slightly higher, ranging from 83% to 91%.
- Thus, the data suggest a positive relationship between term retention and enrollment in prerequisite-enforced English and math courses.
- With the exception of Asians, comparisons of term retention rates between fall 1996 and fall 1998 by ethnic group revealed significant increases for Latinos, African Americans, Filipinos, and whites.

Impact on Term-to-Term Persistence

Table C-13 shows the impact of prerequisite enforcement (fall 1996 vs. fall 1998) on term-to-term persistence rates for: (1) students enrolled in at least one 1997 prerequisite-enforced English or math course and (2) students who successfully completed at least one 1997 prerequisite-enforced English or math course.

- The data in Table C-13 show term-to-term persistence rates for students in the first group ranging from 74% to 86% and slightly higher rates for students in the second group, ranging from 81% to 91%.
- These data also suggest that successful completion of a 1997 prerequisite-enforced English or math courses is associated with higher term-to-term persistence rates.
- All ethnic groups showed decreases in term-to-term persistence rates between fall 1996 and fall 1998. In particular, the decreases for Asians, Latinos, and African Americans were found to be statistically significant.

Table C-2

Change in Course Enrollments by Ethnic Group
All District Courses - TWO-YEAR CHANGE - Fall 1996 vs. Fall 1998

Total Enrollments	
	All District Courses
Fall 1996	108,034
Fall 1998	112,859
Change	4,825
% Change	4.5%

Asian Enrollments	
	All District Courses
Fall 1996	15,159
Fall 1998	14,568
Change	-591
% Change	-3.9%

Latino Enrollments	
	All District Courses
Fall 1996	17,164
Fall 1998	19,176
Change	2,012
% Change	11.7%

African American	
	All District Courses
Fall 1996	13,722
Fall 1998	14,017
Change	295
% Change	2.1%

Filipino Enrollments	
	All District Courses
Fall 1996	7,222
Fall 1998	7,693
Change	471
% Change	6.5%

White Enrollments	
	All District Courses
Fall 1996	45,538
Fall 1998	47,242
Change	1,704
% Change	3.7%

Table C-3

Change in Course Enrollments by Ethnic Group
English Courses - TWO-YEAR CHANGE - Fall 1996 vs. Fall 1998

	Total Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	221	131	701	543	1372	1376	3224	469
Fall 1998	223	234	848	533	1957	1055	2710	351
Change	2	103	147	-10	585	-321	-514	-118
% Change	0.9%	78.6%	21.0%	-1.8%	42.6%	-23.3%	-15.9%	-25.2%
	Asian Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	136	91	159	141	212	209	436	36
Fall 1998	108	121	153	88	332	182	270	21
Change	-28	30	-6	-53	120	-27	-166	-15
% Change	-20.6%	33.0%	-3.8%	-37.6%	56.6%	-12.9%	-38.1%	-41.7%
	Latino Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	33	23	161	131	370	351	540	84
Fall 1998	59	52	229	148	514	287	520	63
Change	26	29	68	17	144	-64	-20	-21
% Change	78.8%	126.1%	42.2%	13.0%	38.9%	-18.2%	-3.7%	-25.0%
	African American Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	NA	NA	148	122	255	240	425	32
Fall 1998	NA	NA	187	120	290	189	254	15
Change	NA	NA	39	-2	35	-51	-171	-17
% Change	NA	NA	26.4%	-1.6%	13.7%	-21.3%	-40.2%	-53.1%
	Filipino Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	NA	NA	47	40	104	130	251	23
Fall 1998	NA	NA	61	38	185	81	219	28
Change	NA	NA	14	-2	81	-49	-32	5
% Change	NA	NA	29.8%	-5.0%	77.9%	-37.7%	-12.7%	21.7%
	White Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	NA	NA	147	81	348	344	1295	248
Fall 1998	NA	NA	170	101	473	244	1189	172
Change	NA	NA	23	20	125	-100	-106	-76
% Change	NA	NA	15.6%	24.7%	35.9%	-29.1%	-8.2%	-30.6%

Note: NA - Not applicable because enrollment numbers were too small.

Table C-4

Change in Course Enrollments by Ethnic Group
Math Courses - TWO-YEAR CHANGE - Fall 1996 vs. Fall 1998

	Total Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54	Math 100	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	463	1343	2324	2112	543	563	1033	340	355
Fall 1998	515	1127	2441	2464	584	618	992	292	394
Change	52	-216	117	352	41	55	-41	-48	39
% Change	11.2%	-16.1%	5.0%	16.7%	7.6%	9.8%	-4.0%	-14.1%	11.0%
	Asian Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54	Math 100	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	32	129	270	293	88	107	136	69	76
Fall 1998	42	103	239	262	130	87	142	61	88
Change	10	-26	-31	-31	42	-20	6	-8	12
% Change	31.3%	-20.2%	-11.5%	-10.6%	47.7%	-18.7%	4.4%	-11.6%	15.8%
	Latino Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54	Math 100	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	105	342	484	376	92	52	145	34	41
Fall 1998	130	276	558	427	85	72	140	35	54
Change	25	-66	74	51	-7	20	-5	1	13
% Change	23.8%	-19.3%	15.3%	13.6%	-7.6%	38.5%	-3.4%	2.9%	31.7%
	African American Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54	Math 100	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	172	290	371	239	36	45	107	22	31
Fall 1998	192	254	342	272	38	38	96	13	19
Change	20	-36	-29	33	2	-7	-11	-9	-12
% Change	11.6%	-12.4%	-7.8%	13.8%	5.6%	-15.6%	-10.3%	-40.9%	-38.7%
	Filipino Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54	Math 100	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	24	75	144	185	69	42	92	28	29
Fall 1998	17	75	154	202	48	63	83	20	38
Change	-7	0	10	17	-21	21	-9	-8	9
% Change	-29.2%	0.0%	6.9%	9.2%	-30.4%	50.0%	-9.8%	-28.6%	31.0%
	White Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54	Math 100	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	100	416	875	848	225	273	471	157	141
Fall 1998	85	333	949	1043	234	311	426	131	162
Change	-15	-83	74	195	9	38	-45	-26	21
% Change	-15.0%	-20.0%	8.5%	23.0%	4.0%	13.9%	-9.6%	-16.6%	14.9%

Table C-5

Change in Course Enrollments by Ethnic Group
Other Courses - TWO-YEAR CHANGE - Fall 1996 vs. Fall 1998

Total Enrollments		
	Biology 205	Spanish 102
Fall 1996	230	765
Fall 1998	187	720
Change	-43	-45
% Change	-18.7%	-5.9%
Asian Enrollments		
	Biology 205	Spanish 102
Fall 1996	36	63
Fall 1998	21	51
Change	-15	-12
% Change	-41.7%	-19.0%
Latino Enrollments		
	Biology 205	Spanish 102
Fall 1996	19	144
Fall 1998	26	111
Change	7	-33
% Change	36.8%	-22.9%
African American Enrollments		
	Biology 205	Spanish 102
Fall 1996	21	67
Fall 1998	16	65
Change	-5	-2
% Change	-23.8%	-3.0%
Filipino Enrollments		
	Biology 205	Spanish 102
Fall 1996	39	52
Fall 1998	25	43
Change	-14	-9
% Change	-35.9%	-17.3%
White Enrollments		
	Biology 205	Spanish 102
Fall 1996	100	365
Fall 1998	85	372
Change	-15	7
% Change	-15.0%	1.9%

Table C-6

Course Enrollment
Change in Ethnic Group Distributions
English Courses - TWO-YEAR CHANGE - Fall 1996 vs. Fall 1998

		Native American	Asian	African American	White	Latino	Filipino	Other	Decline	Total N
Non-native Speaker	English 9*	Fall 1996	0.0%	61.5%	3.6%	10.4%	14.9%	2.7%	5.0%	1.8%
		Fall 1998	0.0%	48.4%	6.3%	8.1%	26.5%	4.5%	5.4%	0.9%
		Change in % Points	0.0	-13.1	2.7	-2.3	11.6	1.8	0.4	-0.9
		% Change	0.0	-21.3	75.0	-22.1	77.9	66.7	8.0	-50.0
Basic Skills Level	English 10	Fall 1996	0.0%	69.5%	0.8%	6.9%	17.6%	1.5%	3.1%	0.8%
		Fall 1998	0.9%	51.7%	3.8%	14.5%	22.2%	1.3%	4.7%	0.9%
		Change in % Points	0.9	-17.8	3.0	7.6	4.6	-0.2	1.6	0.1
		% Change	0.0	-25.6	375.0	110.1	26.1	-13.3	51.6	12.5
Associate Degree Level	English 50	Fall 1996	1.4%	22.7%	21.1%	21.0%	23.0%	6.7%	2.1%	2.0%
		Fall 1998	0.9%	18.0%	22.1%	20.0%	27.0%	7.2%	3.3%	1.4%
		Change in % Points	-0.5	-4.7	1.0	-1.0	4.0	0.5	1.2	-0.6
		% Change	-35.7	-20.7	4.7	-4.8	17.4	7.5	57.1	-30.0
Transfer Level	English 55**	Fall 1996	1.1%	26.0%	22.5%	14.9%	24.1%	7.4%	3.1%	0.9%
		Fall 1998	1.5%	16.5%	22.5%	18.9%	27.8%	7.1%	4.3%	1.3%
		Change in % Points	0.4	-9.5	0.0	4.0	3.7	-0.3	1.2	0.4
		% Change	36.4	-36.5	0.0	26.8	15.4	-4.1	38.7	44.4
Associate Degree Level	English 51**	Fall 1996	1.2%	15.5%	18.6%	25.4%	27.0%	7.6%	3.1%	1.7%
		Fall 1998	1.1%	17.0%	14.8%	24.2%	26.3%	9.5%	3.6%	3.6%
		Change in % Points	-0.1	1.5	-3.8	-1.2	-0.7	1.9	0.5	1.9
		% Change	-8.3	9.7	-20.4	-4.7	-2.6	25.0	16.1	111.8
Transfer Level	English 56	Fall 1996	1.7%	15.2%	17.4%	25.0%	25.5%	9.4%	3.6%	2.0%
		Fall 1998	0.9%	17.3%	17.9%	23.1%	27.2%	7.7%	2.7%	3.2%
		Change in % Points	-0.8	2.1	0.5	-1.9	1.7	-1.7	-0.9	1.2
		% Change	-47.1	13.8	2.9	-7.6	6.7	-18.1	-25.0	60.0
Transfer Level	English 101***	Fall 1996	1.4%	13.5%	13.2%	40.2%	16.7%	7.8%	3.2%	4.0%
		Fall 1998	1.2%	10.0%	9.4%	43.9%	19.2%	8.1%	3.3%	5.0%
		Change in % Points	-0.2	-3.5	-3.8	3.7	2.5	0.3	0.1	1.0
		% Change	-14.3	-25.9	-28.8	9.2	15.0	3.8	3.1	25.0
Transfer Level	English 105	Fall 1996	1.7%	7.7%	6.8%	52.9%	17.9%	4.9%	1.9%	6.2%
		Fall 1998	2.0%	6.0%	4.3%	49.0%	17.9%	8.0%	3.4%	9.4%
		Change in % Points	0.3	-1.7	-2.5	-3.9	0.0	3.1	1.5	3.2
		% Change	17.6	-22.1	-36.8	-7.4	0.0	63.3	78.9	51.6

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Note: Shaded rows reflect significant change.

Appendix C-6

Table C-7.1

**Course Enrollment
Change in Ethnic Group Distributions**

TWO-YEAR CHANGE, Fall 1996 vs. Fall 1998

		Native American	Asian	African American	White	Latino	Filipino	Other	Decline	Total N
Basic Skills Level	Math 32									
	Fall 1996	1.1%	6.9%	37.1%	21.6%	22.7%	5.2%	3.5%	1.9%	463
	Fall 1998	1.4%	8.2%	37.3%	16.5%	25.2%	3.3%	5.2%	2.9%	515
	Change in % Points	0.3	1.3	0.2	-5.1	2.5	-1.9	1.7	1.0	
	% Change	0.0	18.8	0.5	-23.6	11.0	-36.5	48.6	52.6	
	Math 35									
Associate Degree Level	Fall 1996	1.5%	9.6%	21.6%	31.0%	25.5%	5.6%	3.2%	2.1%	1,343
	Fall 1998	1.2%	9.1%	22.5%	29.5%	24.5%	6.7%	2.9%	3.5%	1,127
	Change in % Points	-0.3	-0.5	0.9	-1.5	-1.0	1.1	-0.3	1.4	
	% Change	0.0	-5.2	4.2	-4.8	-3.9	19.6	-9.4	66.7	
	Math 54									
	Fall 1996	1.2%	11.6%	16.0%	37.7%	20.8%	6.2%	3.1%	3.5%	2,324
Math 100**	Fall 1998	1.2%	9.8%	14.0%	38.9%	22.9%	6.3%	3.2%	3.8%	2,441
	Change in % Points	0.0	-1.8	-2.0	1.2	2.1	0.1	0.1	0.3	
	% Change	0.0	-15.5	-12.5	3.2	10.1	1.6	3.2	8.6	
	Fall 1996	1.4%	13.9%	11.3%	40.2%	17.8%	8.8%	2.3%	4.4%	2,112
	Fall 1998	1.5%	10.6%	11.0%	42.3%	17.3%	8.2%	3.8%	5.2%	2,464
	Change in % Points	0.1	-3.3	-0.3	2.1	-0.5	-0.6	1.5	0.8	
	% Change	7.1	-23.7	-2.7	5.2	-2.8	-6.8	65.2	18.2	

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Note: Shaded rows reflect significant changes.

Appendix C-7.1

Table C-7.2

Course Enrollment
Change in Ethnic Group Distributions
Math Courses (Transfer Level) - TWO-YEAR CHANGE - Fall 1996 vs. Fall 1998

		Math Courses (Transfer Level) - TWO-YEAR CHANGE - Fall 1996 vs. Fall 1998							Decline	Total N
		Native American	Asian American	White	Latino	Filipino	Other			
Transfer Level	Math 104*	Fall 1996	0.6%	16.2%	41.4%	16.9%	12.7%	2.4%	3.1%	543
		Fall 1998	1.0%	22.3%	40.1%	14.6%	8.2%	2.4%	5.0%	584
		Change in % Points	0.4	6.1	-0.1	-2.3	-4.5	0.0	1.9	
		% Change	0.0	37.7	-1.5	-13.6	-35.4	0.0	61.3	
	Math 116*	Fall 1996	2.1%	19.0%	48.5%	9.2%	7.5%	3.2%	2.5%	563
		Fall 1998	1.1%	14.1%	50.3%	11.7%	10.2%	3.4%	3.1%	618
		Change in % Points	-1.0	-4.9	1.8	2.5	2.7	0.2	0.6	
		% Change	0.0	-25.8	3.7	27.2	36.0	6.3	24.0	
	Math 119	Fall 1996	1.3%	13.2%	45.6%	14.0%	8.9%	2.6%	4.1%	1,033
		Fall 1998	1.3%	14.3%	42.9%	14.1%	8.4%	3.5%	5.7%	992
		Change in % Points	0.0	1.1	-0.7	0.1	-0.5	0.9	1.6	
		% Change	0.0	8.3	-6.7	0.7	-5.6	34.6	39.0	
	Math 121	Fall 1996	1.2%	20.3%	46.2%	10.0%	8.2%	3.8%	3.8%	340
		Fall 1998	1.0%	20.9%	44.9%	12.0%	6.8%	4.8%	5.1%	292
		Change in % Points	-0.2	0.6	-2.0	2.0	-1.4	1.0	1.3	
		% Change	-16.7	3.0	-30.8	20.0	-17.1	26.3	34.2	
	Math 141	Fall 1996	1.1%	21.4%	39.7%	11.5%	8.2%	3.4%	5.9%	355
		Fall 1998	0.8%	22.3%	41.1%	13.7%	9.6%	3.8%	3.8%	394
		Change in % Points	-0.3	0.9	-3.9	2.2	1.4	0.4	-2.1	
		% Change	-27.3	4.2	-44.8	3.5	19.1	11.8	-35.6	

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Note: Shaded rows reflect significant changes.

Appendix C-7.2

Table C-8

Course Enrollment
Change in Ethnic Group Distributions
Other Courses - TWO-YEAR CHANGE - Fall 1996 vs. Fall 1998

	Native American	Asian	African American	White	Latino	Filipino	Other	Decline	Total N
Biology 205	Fall 1996	1.7%	15.7%	9.1%	43.5%	8.3%	17.0%	1.7%	230
	Fall 1998	0.0%	0.1%	8.6%	45.5%	13.9%	13.4%	2.1%	187
	Change in % Points	-1.7	-15.6	-0.5	2.0	5.6	-3.6	0.4	2.3
Spanish 102	% Change	0.0	-99.3	-5.5	4.6	67.5	-21.2	23.5	76.7
	Fall 1996	1.4%	8.2%	8.8%	47.7%	18.8%	6.8%	2.9%	765
	Fall 1998	1.5%	7.1%	9.0%	51.7%	15.4%	6.0%	4.0%	720
	Change in % Points	0.1	-1.1	0.2	4.0	-3.4	-0.8	1.1	-0.1
	% Change	0.0	-13.4	2.3	8.4	-18.1	-11.8	37.9	-1.9

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table C-9

English Courses - TWO-YEAR CHANGE - Fall 1996 vs. Fall 1998

	Total Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	59.3%	64.1%	51.4%	52.9%	42.8%	62.1%	53.2%	54.8%
Fall 1998	51.6%	53.8%	46.6%	51.9%	44.3%	64.5%	55.6%	52.7%
Change	-7.7%	-10.3%	-4.8%	-1.0%	1.5%	2.4%	2.4%	-2.1%
	Asian Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51*	English 56	English 101	English 105
Fall 1996	62.5%	64.8%	50.9%	56.0%	34.0%	67.0%	58.9%	50.0%
Fall 1998	50.9%	52.1%	43.1%	55.2%	43.7%	68.1%	54.4%	57.1%
Change	-11.6%	-12.7%	-7.8%	-0.8%	9.7%	1.1%	-4.5%	7.1%
	Latino Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	57.6%	60.9%	47.2%	51.9%	42.2%	59.8%	47.0%	44.0%
Fall 1998	50.8%	48.1%	41.9%	54.1%	37.4%	62.4%	49.4%	60.3%
Change	-6.8%	-12.8%	-5.3%	2.2%	-4.8%	2.6%	2.4%	16.3%
	African American Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	NA	NA	50.0%	57.4%	38.8%	59.2%	41.2%	56.3%
Fall 1998	NA	NA	47.6%	45.8%	35.9%	57.7%	47.6%	46.7%
Change	NA	NA	-2.4%	-11.6%	-2.9%	-1.5%	6.4%	-9.6%
	Filipino Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105*
Fall 1996	NA	NA	61.7%	45.0%	52.9%	60.0%	51.4%	56.5%
Fall 1998	NA	NA	45.9%	47.4%	52.4%	70.4%	55.7%	25.0%
Change	NA	NA	-15.8%	2.4%	-0.5%	10.4%	4.3%	-31.5%
	White Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55***	English 51	English 56	English 101	English 105
Fall 1996	NA	NA	55.8%	50.6%	46.3%	62.5%	59.5%	58.9%
Fall 1998	NA	NA	53.5%	70.3%	52.0%	68.9%	60.6%	55.8%
Change	NA	NA	-2.3%	19.7%	5.7%	6.4%	1.1%	-3.1%

Note 1: Shaded columns reflect significant changes.

Note 2: NA - Not applicable because enrollment numbers were too small.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table C-10

Math Courses - TWO-YEAR CHANGE - Fall 1996 vs. Fall 1998

	Total Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35*	Math 54***	Math 100	Math 104	Math 116**	Math 119***	Math 121	Math 141***
Fall 1996	50.3%	54.7%	47.5%	44.7%	46.2%	55.8%	50.9%	55.9%	38.9%
Fall 1998	48.7%	50.0%	41.2%	44.4%	42.8%	48.2%	58.8%	62.0%	54.1%
Change	-1.6%	-4.7%	-6.3%	-0.3%	-3.4%	-7.6%	7.9%	6.1%	15.2%
	Asian Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32*	Math 35	Math 54**	Math 100	Math 104	Math 116	Math 119**	Math 121*	Math 141
Fall 1996	71.9%	65.9%	62.6%	53.6%	48.9%	58.9%	50.0%	56.5%	35.5%
Fall 1998	47.6%	61.2%	51.0%	50.0%	46.2%	50.6%	67.6%	73.8%	50.0%
Change	-24.3%	-4.7%	-11.6%	-3.6%	-2.7%	-8.3%	17.6%	17.3%	14.5%
	Latino Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54***	Math 100	Math 104*	Math 116	Math 119	Math 121	Math 141*
Fall 1996	47.6%	51.5%	41.7%	39.4%	45.7%	42.3%	44.1%	32.4%	24.4%
Fall 1998	51.5%	47.8%	31.5%	38.9%	29.4%	41.7%	52.9%	54.3%	50.0%
Change	3.9%	-3.7%	-10.2%	-0.5%	-16.3%	-0.6%	8.8%	21.9%	25.6%
	African American Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54	Math 100	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	48.8%	42.8%	33.4%	27.6%	22.2%	35.6%	43.9%	45.5%	25.8%
Fall 1998	40.1%	42.1%	28.4%	32.7%	18.4%	26.3%	47.9%	23.1%	31.6%
Change	-8.7%	-0.7%	-5.0%	5.1%	-3.8%	-9.3%	4.0%	-22.4%	5.8%
	Filipino Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35**	Math 54	Math 100	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	45.8%	69.3%	44.4%	50.3%	44.9%	59.5%	42.4%	50.0%	65.5%
Fall 1998	70.6%	48.0%	44.2%	44.6%	47.9%	46.0%	43.4%	65.0%	55.3%
Change	24.8%	-21.3%	-0.2%	-5.7%	3.0%	-13.5%	1.0%	15.0%	-10.2%
	White Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54	Math 100	Math 104	Math 116	Math 119**	Math 121	Math 141**
Fall 1996	46.0%	59.4%	52.9%	48.2%	50.7%	59.7%	55.2%	65.6%	41.1%
Fall 1998	58.8%	56.8%	48.5%	48.6%	47.9%	54.0%	64.3%	63.4%	59.9%
Change	12.8%	-2.6%	-4.4%	0.4%	-2.8%	-5.7%	9.1%	-2.2%	18.8%

Note: Shaded columns reflect significant changes.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table C-11

Other Courses - TWO-YEAR CHANGE - Fall 1996 vs. Fall 1998

Total Course Success Rates		
	Biology 205	Spanish 102
Fall 1996	71.3%	68.1%
Fall 1998	74.9%	71.7%
Change	3.6%	3.6%
Asian Course Success Rates		
	Biology 205	Spanish 102
Fall 1996	66.7%	71.4%
Fall 1998	85.7%	72.5%
Change	19.0%	1.1%
Latino Course Success Rates		
	Biology 205	Spanish 102
Fall 1996	68.4%	77.8%
Fall 1998	69.2%	82.0%
Change	0.8%	4.2%
African American Course Success Rates		
	Biology 205	Spanish 102
Fall 1996	61.9%	67.2%
Fall 1998	62.5%	69.2%
Change	0.6%	2.0%
Filipino Course Success Rates		
	Biology 205	Spanish 102*
Fall 1996	74.4%	57.7%
Fall 1998	68.0%	81.4%
Change	-6.4%	23.7%
White Course Success Rates		
	Biology 205	Spanish 102
Fall 1996	71.0%	66.0%
Fall 1998	78.8%	68.3%
Change	7.8%	2.3%

Note: Shaded columns reflect significant changes.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table C-12

Change in Term Retention Rate by Ethnic Group
TWO-YEAR CHANGE - Fall 1996 vs. Fall 1998

Total Term Retention Rates		
	All District Students***	Students Enrolled in Prerequisite-enforced English or Math Courses* ¹
Fall 1996	73.8%	86.8%
Fall 1998	76.4%	88.0%
Change	2.6%	1.2%
Asian Term Retention Rates		
	All District Asian Students	Students Enrolled in Prerequisite-enforced English or Math Courses ¹
Fall 1996	77.8%	90.7%
Fall 1998	78.1%	89.9%
Change	0.3%	-0.8%
Latino Term Retention Rates		
	All District Latino Students**	Students Enrolled in Prerequisite-enforced English or Math Courses* ¹
Fall 1996	74.6%	85.5%
Fall 1998	76.8%	88.0%
Change	2.2%	2.5%
African American Term Retention Rates		
	All District African American Students*	Students Enrolled in Prerequisite-enforced English or Math Courses* ¹
Fall 1996	69.4%	83.2%
Fall 1998	71.9%	86.8%
Change	2.5%	3.6%
Filipino Term Retention Rates		
	All District Filipino Students**	Students Enrolled in Prerequisite-enforced English or Math Courses ¹
Fall 1996	76.3%	89.4%
Fall 1998	79.2%	90.9%
Change	2.9%	1.5%
White Term Retention Rates		
	All District White Students***	Students Enrolled in Prerequisite-enforced English or Math Courses ¹
Fall 1996	73.7%	86.7%
Fall 1998	76.7%	87.1%
Change	3.0%	0.4%

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

1. Unduplicated count of students enrolled in at least one of the

Note: Shaded columns reflect significant changes.

Table C-13

Change in Term-to-Term Persistence Rate by Ethnic Group
Students Enrolled in English and Math - TWO-YEAR CHANGE - Fall 1996 vs. Fall 1998

Total Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses**** ²
Fall 1996 to Spring 1997	79.6%	87.1%
Fall 1998 to Spring 1999	76.5%	84.7%
Change	-3.1%	-2.4%
Asian Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses** ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses** ²
Fall 1996 to Spring 1997	86.1%	91.3%
Fall 1998 to Spring 1999	81.6%	87.6%
Change	-4.5%	-3.7%
Latino Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses ²
Fall 1996 to Spring 1997	79.7%	87.6%
Fall 1998 to Spring 1999	75.8%	86.6%
Change	-3.9%	-1.0%
African American Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses**** ²
Fall 1996 to Spring 1997	79.9%	89.4%
Fall 1998 to Spring 1999	73.9%	81.1%
Change	-6.0%	-8.3%
Filipino Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses ²
Fall 1996 to Spring 1997	79.2%	83.4%
Fall 1998 to Spring 1999	77.0%	82.0%
Change	-2.2%	-1.4%
White Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses ²
Fall 1996 to Spring 1997	76.9%	85.3%
Fall 1998 to Spring 1999	75.3%	84.1%
Change	-1.6%	-1.2%

1. Unduplicated count of students enrolled in at least one of the 1997 prerequisite-enforced English or math courses examined in this report.
2. Unduplicated count of students successfully completing at least one of the 1997 prerequisite-enforced English or math courses examined in this report.

Note: Shaded columns reflect significant changes.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Appendix D

Long-term Impact of Prerequisite Enforcement on Underrepresented Students

THREE-YEAR CHANGE – FALL 1996 vs. FALL 1999

Tables D-1 to D-13

Appendix D

Long-term Impact of Prerequisite Enforcement on Underrepresented Students

THREE-YEAR CHANGE – FALL 1996 vs. FALL 1999

Tables D-1 to D-13

Table D-1

Long-term Impact of Prerequisite Enforcement on Underrepresented Students

THREE-YEAR CHANGE – FALL 1996 vs. FALL 1999

Impact on Course Enrollments

Districtwide – (Table D-2)

- From fall 1996 to fall 1999, total course enrollments grew from 108,034 to 115,064, a 6% increase.
- Latinos had the largest enrollment gains (+16%), followed by Filipinos (+8%), and whites (+8%).
- Asians and African Americans had noticeable decreases in course enrollments, -7% and -4% respectively.

English Courses – (Table D-3)

- Total enrollments in the transfer level courses showed a decrease in English 101, while English 105 enrollments remained relatively the same.
- Enrollments decreased in the reading courses (English 55, English 56), but increased in the writing courses (English 50, English 51).
- Asians and African Americans had noticeable enrollment decreases in the transfer level courses. Filipinos had decreased enrollments in one transfer course (English 101), but increased enrollments in the other (English 105).
- With the exception of Asians and African Americans, all groups had enrollment increases in the writing courses (English 50, English 51).

Math Courses – (Table D-4)

- Total enrollments were generally up. Only three courses showed decreases in total course enrollments, Math 35, (-30%); Math 116, (-6%); and Math 121, (-7%).
- African American enrollments decreased in all but two of the math courses included in this study.
- In contrast, Latinos had enrollment increases in all but one math course.
- Enrollment changes for Asians, Filipinos and whites were mixed.

Other Courses – (Table D-5)

- Total student enrollments in Biology 205 and Spanish 102 decreased by 15% and 3% respectively.

- African Americans had the largest course enrollment decreases in Biology 205 (-52%), followed by Filipinos, (-31%); Asians, (-14%) and Latinos, (-10%).
- For Spanish 102, all groups had noticeable enrollment decreases (Latinos, -10%; Filipinos, -10%; Asians, -6%; African Americans, -6%; whites, -3%).

Test of Statistical Significance – (Table D-6, Table D-7, Table D-8)

A statistical test of association (Chi-square analysis) was used to test the extent to which the distribution of ethnic course enrollments in fall 1996 differed from the distribution in fall 1999.

- Ten out of the nineteen courses assessed in this report had significant changes with regard to enrollment distributions by ethnic group.
- In particular, Asians and African Americans were the two primary groups contributing to the observed distributional changes.
- Of the courses with significant changes in ethnic distributions, the proportion of Asian enrollments decreased in English 9, English 10, English 50, English 55, English 101, Math 54, Math 100, and Math 116.
- The proportion of African American enrollments also decreased considerably in English 50, English 51, English 101, Math 54, and Math 119.
- In contrast, Latino enrollments increased markedly in English 9, English 10, English 50, and Math 116.

Impact on Successful Course Completion

English Courses – (Table D-9)

- In terms of changes in course success rate by ethnic group, there were four observations with significant increases: Asians, English 51; African Americans, English 101; and whites, English 51, English 101.
- In comparison, course success rates for African Americans significantly decreased in English 55, English 51, and English 56.
- Asians in English 10 also had a significant decrease in course success rate.

Math Courses – (Table D-10)

- Total course success rates increased for three of the five transfer level courses (Math 119, Math 121, Math 141).
- Asians and Filipinos had significant decreases in course success rates (Asians, Math 54; Filipinos, Math 104, Math 116).
- Groups with statistically significant increases in course success rates included Asians, (Math 119, Math 141); Latinos, (Math 141); African Americans, (Math 100); and whites (Math 32, Math 100, Math 119, Math 141).

Other Courses – (Table D-11)

- The data provided in Table D-11 show an increase in total course success rate for only Biology 205.
- Course success rate increases for Filipinos in Spanish 102 was the only observation found to be statistically significant.

Impact on Term Retention

Table D-12 shows the change in term retention rates between fall 1996 and fall 1999 for: (1) all district students and (2) students enrolled in at least one 1997 prerequisite-enforced English or math course.

- Overall, between fall 1996 and fall 1999, the data in Table D-12 show moderate increases in term retention rate.
- Term retention rates for the students in the first group ranged from 69% to 81%, while the rates for the second group were slightly higher, ranging from 83% to 94%.
- Thus, the data suggest a positive relationship between term retention and enrollment in prerequisite-enforced English and math courses.
- With the exception of one observation, comparisons of term retention rates between fall 1996 and fall 1999 by ethnic group revealed significant increases for ethnic groups.

Impact on Term-to-Term Persistence

Table D-13 shows the impact of prerequisite enforcement (fall 1996 vs. fall 1999) on term-to-term persistence rates for: (1) students enrolled in at least one 1997 prerequisite-enforced English or math course and (2) students who successfully completed at least one 1997 prerequisite-enforced English or math course.

- The data in Table D-13 show term-to-term persistence rates for students in the first group ranging from 73% to 86% and slightly higher rates for students in the second group, ranging from 80% to 91%.
- These data also suggest that successful completion of a 1997 prerequisite-enforced English or math courses is associated with higher rates of term-to-term persistence.
- All ethnic groups showed decreases in term-to-term persistence rate between fall 1996 and fall 1999. In particular, the decreases for Asians, Latinos, African Americans, and whites were found to be statistically significant.

Table D-2

Change in Course Enrollments by Ethnic Group
All District Courses - THREE-YEAR CHANGE - Fall 1996 vs. Fall 1999

Total Enrollments	
	All District Courses
Fall 1996	108,034
Fall 1999	115,064
Change	7,030
% Change	6.5%

Asian Enrollments	
	All District Courses
Fall 1996	15,159
Fall 1999	14,105
Change	-1,054
% Change	-7.0%

Latino Enrollments	
	All District Courses
Fall 1996	17,164
Fall 1999	19,976
Change	2,812
% Change	16.4%

African American	
	All District Courses
Fall 1996	13,722
Fall 1999	13,201
Change	-521
% Change	-3.8%

Filipino Enrollments	
	All District Courses
Fall 1996	7,222
Fall 1999	7,824
Change	602
% Change	8.3%

White Enrollments	
	All District Courses
Fall 1996	45,538
Fall 1999	49,005
Change	3,467
% Change	7.6%

Table D-3

Change in Course Enrollments by Ethnic Group
English Courses - THREE-YEAR CHANGE - Fall 1996 vs. Fall 1999

	Total Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	221	131	701	543	1372	1376	3224	469
Fall 1999	228	222	729	431	2192	967	2936	472
Change	7	91	28	-112	820	-409	-288	3
% Change	3.2%	69.5%	4.0%	-20.6%	59.8%	-29.7%	-8.9%	0.6%
	Asian Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	136	91	159	141	212	209	436	36
Fall 1999	94	91	109	77	382	179	323	28
Change	-42	0	-50	-64	170	-30	-113	-8
% Change	-30.9%	0.0%	-31.4%	-45.4%	80.2%	-14.4%	-25.9%	-22.2%
	Latino Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	33	23	161	131	370	351	540	84
Fall 1999	65	66	204	104	586	265	537	82
Change	32	43	43	-27	216	-86	-3	-2
% Change	97.0%	187.0%	26.7%	-20.6%	58.4%	-24.5%	-0.6%	-2.4%
	African American Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	NA	NA	148	122	255	240	425	32
Fall 1999	NA	NA	138	115	266	176	286	22
Change	NA	NA	-10	-7	11	-64	-139	-10
% Change	NA	NA	-6.8%	-5.7%	4.3%	-26.7%	-32.7%	-31.3%
	Filipino Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	NA	NA	47	40	104	130	251	23
Fall 1999	NA	NA	71	33	189	77	223	40
Change	NA	NA	24	-7	85	-53	-28	17
% Change	NA	NA	51.1%	-17.5%	81.7%	-40.8%	-11.2%	73.9%
	White Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	NA	NA	147	81	348	344	1295	248
Fall 1999	NA	NA	160	73	594	203	1289	236
Change	NA	NA	13	-8	246	-141	-6	-12
% Change	NA	NA	8.8%	-9.9%	70.7%	-41.0%	-0.5%	-4.8%

Note: NA - Not applicable because enrollment numbers were too small.

Table D-4

Change in Course Enrollments by Ethnic Group
Math Courses - THREE-YEAR CHANGE - Fall 1996 vs. Fall 1999

	Total Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54¹	Math 100	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	463	1343	2324	2112	543	563	1033	340	355
Fall 1999	519	935	2554	2146	666	531	1074	316	403
Change	56	-408	230	34	123	-32	41	-24	48
% Change	12.1%	-30.4%	9.9%	1.6%	22.7%	-5.7%	4.0%	-7.1%	13.5%
	Asian Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54¹	Math 100	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	32	129	270	293	88	107	136	69	76
Fall 1999	22	76	219	219	121	84	146	72	87
Change	-10	-53	-51	-74	33	-23	10	3	11
% Change	-31.3%	-41.1%	-18.9%	-25.3%	37.5%	-21.5%	7.4%	4.3%	14.5%
	Latino Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54¹	Math 100	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	105	342	484	376	92	52	145	34	41
Fall 1999	139	240	605	437	102	72	152	40	46
Change	34	-102	121	61	10	20	7	6	5
% Change	32.4%	-29.8%	25.0%	16.2%	10.9%	38.5%	4.8%	17.6%	12.2%
	African American Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54¹	Math 100	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	172	290	371	239	36	45	107	22	31
Fall 1999	192	183	320	200	44	41	81	17	23
Change	20	-107	-51	-39	8	-4	-26	-5	-8
% Change	11.6%	-36.9%	-13.7%	-16.3%	22.2%	-8.9%	-24.3%	-22.7%	-25.8%
	Filipino Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54¹	Math 100	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	24	75	144	185	69	42	92	28	29
Fall 1999	20	75	174	167	64	47	102	33	51
Change	-4	0	30	-18	-5	5	10	5	22
% Change	-16.7%	0.0%	20.8%	-9.7%	-7.2%	11.9%	10.9%	17.9%	75.9%
	White Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54¹	Math 100	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	100	416	875	848	225	273	471	157	141
Fall 1999	93	302	964	944	269	236	498	132	150
Change	-7	-114	89	96	44	-37	27	-25	9
% Change	-7.0%	-27.4%	10.2%	11.3%	19.6%	-13.6%	5.7%	-15.9%	6.4%

Note 1: Math 54 was replaced in 1999 by Math 95.

Table D-5

Change in Course Enrollments by Ethnic Group
Other Courses - THREE-YEAR CHANGE - Fall 1996 vs. Fall 1999

Total Enrollments		
	Biology 205	Spanish 102
Fall 1996	230	765
Fall 1999	195	740
Change	-35	-25
% Change	-15.2%	-3.3%
Asian Enrollments		
	Biology 205	Spanish 102
Fall 1996	36	63
Fall 1999	31	59
Change	-5	-4
% Change	-13.9%	-6.3%
Latino Enrollments		
	Biology 205	Spanish 102
Fall 1996	19	144
Fall 1999	17	129
Change	-2	-15
% Change	-10.5%	-10.4%
African American Enrollments		
	Biology 205	Spanish 102
Fall 1996	21	67
Fall 1999	10	63
Change	-11	-4
% Change	-52.4%	-6.0%
Filipino Enrollments		
	Biology 205	Spanish 102
Fall 1996	39	52
Fall 1999	27	47
Change	-12	-5
% Change	-30.8%	-9.6%
White Enrollments		
	Biology 205	Spanish 102
Fall 1996	100	365
Fall 1999	93	353
Change	-7	-12
% Change	-7.0%	-3.3%

Table D-6

Course Enrollment
Change in Ethnic Group Distributions
English Courses - THREE-YEAR CHANGE - Fall 1996 vs. Fall 1999

		Native American	Asian	African American	White	Latino	Filipino	Other	Decline	Total N
Non-native Speaker	English 9**	Fall 1996	0.0%	61.5%	3.6%	10.4%	14.9%	2.7%	5.0%	1.8%
		Fall 1999	0.0%	41.2%	3.5%	14.9%	28.5%	4.4%	7.0%	0.4%
		Change in % Points	0.0	-20.3	-0.1	4.5	13.6	1.7	2.0	-1.4
		% Change	0.0	-33.0	-2.8	43.3	91.3	63.0	40.0	-77.8
Basic Skills Level	English 10***	Fall 1996	0.0%	69.5%	0.8%	6.9%	17.6%	1.5%	3.1%	0.8%
		Fall 1999	0.9%	41.0%	4.1%	16.2%	29.7%	2.7%	4.5%	0.9%
		Change in % Points	0.9	-28.5	3.3	9.3	12.1	1.2	1.4	0.1
		% Change	0.0	-41.0	412.5	134.8	68.8	80.0	45.2	12.5
Associate Degree Level	English 50***	Fall 1996	1.4%	22.7%	21.1%	21.0%	23.0%	6.7%	2.1%	2.0%
		Fall 1999	0.5%	15.0%	18.9%	21.9%	28.0%	9.7%	2.9%	3.0%
		Change in % Points	-0.9	-7.7	-2.2	0.9	5.0	3.0	0.8	1.0
		% Change	-64.3	-33.9	-10.4	4.3	21.7	44.8	38.1	50.0
Transfer Level	English 55*	Fall 1996	1.1%	26.0%	22.5%	14.9%	24.1%	7.4%	3.1%	0.9%
		Fall 1999	0.5%	17.9%	26.7%	16.9%	24.1%	7.7%	3.5%	2.8%
		Change in % Points	-0.6	-8.1	4.2	2.0	0.0	0.3	0.4	1.9
		% Change	-54.5	-31.2	18.7	13.4	0.0	4.1	12.9	211.1
Associate Degree Level	English 51***	Fall 1996	1.2%	15.5%	18.6%	25.4%	27.0%	7.6%	3.1%	1.7%
		Fall 1999	1.2%	17.4%	12.1%	27.1%	26.7%	8.6%	3.6%	3.2%
		Change in % Points	0.0	1.9	-6.5	1.7	-0.3	1.0	0.5	1.5
		% Change	0.0	12.3	-34.9	6.7	-1.1	13.2	16.1	88.2
Transfer Level	English 56	Fall 1996	1.7%	15.2%	17.4%	25.0%	25.5%	9.4%	3.6%	2.0%
		Fall 1999	1.2%	18.5%	18.2%	21.0%	27.4%	8.0%	3.7%	2.0%
		Change in % Points	-0.5	3.3	0.8	-4.0	1.9	-1.4	0.1	0.0
		% Change	-29.4	21.7	4.6	-16.0	7.5	-14.9	2.8	0.0
Transfer Level	English 101***	Fall 1996	1.4%	13.5%	13.2%	40.2%	16.7%	7.8%	3.2%	4.0%
		Fall 1999	1.2%	11.0%	9.7%	43.9%	18.3%	7.6%	3.3%	5.0%
		Change in % Points	-0.2	-2.5	-3.5	3.7	1.6	-0.2	0.1	1.0
		% Change	-14.3	-18.5	-26.5	9.2	9.6	-2.6	3.1	25.0
Transfer Level	English 105	Fall 1996	1.7%	7.7%	6.8%	52.9%	17.9%	4.9%	1.9%	6.2%
		Fall 1999	2.1%	5.9%	4.7%	50.0%	17.4%	8.5%	4.0%	7.4%
		Change in % Points	0.4	-1.8	-2.1	-2.9	-0.5	3.6	2.1	1.2
		% Change	23.5	-23.4	-30.9	-5.5	-2.8	73.5	110.5	19.4

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Note: Shaded rows reflect significant change.

Appendix D-6

Table D-7.1

**Course Enrollment
Change in Ethnic Group Distributions**

THREE-YEAR CHANGE, Fall 1996 vs. Fall 1999

		Native American	Asian	African American	White	Latino	Filipino	Other	Decline	Total N
Basic Skills Level	Math 32	Fall 1996	1.1%	6.9%	37.1%	21.6%	22.7%	5.2%	3.5%	1.9%
		Fall 1999	1.5%	4.2%	37.0%	17.9%	26.8%	3.9%	5.0%	3.7%
		Change in % Points	0.4	-2.7	-0.1	-3.7	4.1	-1.3	1.5	1.8
		% Change	0.0	-39.1	-0.3	-17.1	18.1	-25.0	42.9	94.7
	Math 35	Fall 1996	1.5%	9.6%	21.6%	31.0%	25.5%	5.6%	3.2%	2.1%
Associate Degree Level		Fall 1999	1.4%	8.1%	19.6%	32.3%	25.7%	5.2%	4.0%	3.7%
		Change in % Points	-0.1	-1.5	-2.0	1.3	0.2	-0.4	0.8	1.6
		% Change	0.0	-15.6	-9.3	4.2	0.8	-7.1	25.0	76.2
	Math 54*** ¹	Fall 1996	1.2%	11.6%	16.0%	37.7%	20.8%	6.2%	3.1%	3.5%
		Fall 1999	1.9%	8.6%	12.5%	37.7%	23.7%	6.8%	4.2%	4.6%
		Change in % Points	0.7	-3.0	-3.5	0.0	2.9	0.6	1.1	1.1
		% Change	58.3	-25.9	-21.9	0.0	13.9	9.7	35.5	31.4
	Math 100***	Fall 1996	1.4%	13.9%	11.3%	40.2%	17.8%	8.8%	2.3%	4.4%
		Fall 1999	1.0%	10.2%	9.3%	44.0%	20.4%	7.8%	3.2%	4.1%
		Change in % Points	-0.4	-3.7	-2.0	3.8	2.6	-1.0	0.9	-0.3
		% Change	-28.6	-26.6	-17.7	9.5	14.6	-11.4	39.1	-6.8

Note 1: Math 54 was replaced in 1999 by Math 95.

Note 2: Shaded rows reflect significant changes.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table D-7.2

Course Enrollment
Change in Ethnic Group Distributions
Math Courses (Transfer Level) - THREE-YEAR CHANGE - Fall 1996 vs. Fall 1999

Transfer Level	Math Courses (Transfer Level)	THREE-YEAR CHANGE - Fall 1996 vs. Fall 1999								Total N
		Native American	Asian	African American	White	Latino	Filipino	Other	Decline	
Math 104	Fall 1996	0.6%	16.2%	6.6%	41.4%	16.9%	12.7%	2.4%	3.1%	543
	Fall 1999	1.8%	18.2%	6.6%	40.4%	15.3%	9.6%	4.1%	4.1%	666
	Change in % Points	1.2	2.0	0.0	-1.0	-1.6	-3.1	1.7	1.0	
	% Change	0.0	12.3	0.0	-2.4	-9.5	-24.4	70.8	32.3	
Math 116*	Fall 1996	2.1%	19.0%	8.0%	48.5%	9.2%	7.5%	3.2%	2.5%	563
	Fall 1999	0.8%	15.8%	7.7%	44.4%	13.6%	8.9%	3.6%	5.3%	531
	Change in % Points	-1.3	-3.2	-0.3	-4.1	4.4	1.4	0.4	2.8	
	% Change	0.0	-16.8	-3.8	-8.5	47.8	18.7	12.5	112.0	
Math 119*	Fall 1996	1.3%	13.2%	10.4%	45.6%	14.0%	8.9%	2.6%	4.1%	1,033
	Fall 1999	0.3%	13.6%	7.5%	46.4%	14.2%	9.5%	3.2%	5.4%	1,074
	Change in % Points	-1.0	0.4	-2.9	0.8	0.2	0.6	0.6	1.3	
	% Change	0.0	3.0	-27.9	1.8	1.4	6.7	23.1	31.7	
Math 121	Fall 1996	1.2%	20.3%	6.5%	46.2%	10.0%	8.2%	3.8%	3.8%	340
	Fall 1999	1.3%	22.8%	5.4%	41.8%	12.7%	10.4%	2.5%	3.2%	316
	Change in % Points	0.1	2.5	-1.1	-4.4	2.7	2.2	-1.3	-0.6	
	% Change	8.3	12.3	-16.9	-9.5	27.0	26.8	-34.2	-15.8	
Math 141	Fall 1996	1.1%	21.4%	8.7%	39.7%	11.5%	8.2%	3.4%	5.9%	355
	Fall 1999	0.7%	21.6%	5.7%	37.2%	11.4%	12.7%	5.2%	5.5%	403
	Change in % Points	-0.4	0.2	-3.0	-2.5	-0.1	4.5	1.8	-0.4	
	% Change	-36.4	0.9	-34.5	-6.3	-0.9	54.9	52.9	-6.8	

Note 1: Math 54 was replaced in 1999 by Math 95.

Note 2: Shaded rows reflect significant changes.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table D-8

Course Enrollment
Change in Ethnic Group Distributions
Other Courses - THREE-YEAR CHANGE - Fall 1996 vs. Fall 1999

		Native American	Asian	African American	White	Latino	Filipino	Other	Decline	Total N
Biology 205	Fall 1996	1.7%	15.7%	9.1%	43.5%	8.3%	17.0%	1.7%	3.0%	230
	Fall 1999	2.1%	15.9%	5.1%	47.7%	8.7%	13.8%	3.1%	3.6%	195
	Change in % Points	0.4	0.2	-4.0	4.2	0.4	-3.2	1.4	0.6	
Spanish 102	% Change	0.0	1.3	-44.0	9.7	4.8	-18.8	82.4	20.0	
	Fall 1996	1.4%	8.2%	8.8%	47.7%	18.8%	6.8%	2.9%	5.4%	765
	Fall 1999	1.5%	8.0%	8.5%	47.7%	17.4%	6.4%	3.5%	7.0%	740
	Change in % Points	0.1	-0.2	-0.3	0.0	-1.4	-0.4	0.6	1.6	
	% Change	0.0	-2.4	-3.4	0.0	-7.4	-5.9	20.7	29.6	

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table D-9

English Courses - THREE-YEAR CHANGE - Fall 1996 vs. Fall 1999

	Total Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10**	English 50	English 55	English 51	English 56	English 101***	English 105
Fall 1996	59.3%	64.1%	51.4%	52.9%	42.8%	62.1%	53.2%	54.8%
Fall 1999	59.6%	47.3%	54.6%	55.0%	43.5%	54.6%	60.0%	52.1%
Change	0.3%	-16.8%	3.2%	2.1%	0.7%	-7.5%	6.8%	-2.7%
	Asian Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10*	English 50	English 55	English 51*	English 56	English 101	English 105
Fall 1996	62.5%	64.8%	50.9%	56.0%	34.0%	67.0%	58.9%	50.0%
Fall 1999	53.2%	47.3%	42.2%	58.4%	43.7%	57.5%	61.0%	64.3%
Change	-9.3%	-17.5%	-8.7%	2.4%	9.7%	-9.5%	2.1%	14.3%
	Latino Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	57.6%	60.9%	47.2%	51.9%	42.2%	59.8%	47.0%	44.0%
Fall 1999	58.5%	47.0%	56.4%	54.8%	36.2%	53.6%	52.7%	46.3%
Change	0.9%	-13.9%	9.2%	2.9%	-6.0%	-6.2%	5.7%	2.3%
	African American Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55*	English 51*	English 56**	English 101**	English 105
Fall 1996	NA	NA	50.0%	57.4%	38.8%	59.2%	41.2%	56.3%
Fall 1999	NA	NA	50.7%	43.5%	30.5%	43.8%	51.7%	31.8%
Change	NA	NA	0.7%	-13.9%	-8.3%	-15.4%	10.5%	-24.5%
	Filipino Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996	NA	NA	61.7%	45.0%	52.9%	60.0%	51.4%	56.5%
Fall 1999	NA	NA	62.0%	57.6%	48.7%	63.6%	53.4%	52.5%
Change	NA	NA	0.3%	12.6%	-4.2%	3.6%	2.0%	-4.0%
	White Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51*	English 56	English 101**	English 105
Fall 1996	NA	NA	55.8%	50.6%	46.3%	62.5%	59.5%	58.9%
Fall 1999	NA	NA	59.4%	64.4%	53.5%	58.1%	65.1%	53.4%
Change	NA	NA	3.6%	13.8%	7.2%	-4.4%	5.6%	-5.5%

Note 1: Shaded columns reflect significant changes.

Note 2: NA - Not applicable because enrollment numbers were too small.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table D-10

Math Courses - THREE-YEAR CHANGE - Fall 1996 vs. Fall 1999

	Total Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54*	Math 100*	Math 104	Math 116	Math 119**	Math 121	Math 141**
Fall 1996	50.3%	54.7%	47.5%	44.7%	46.2%	55.8%	50.9%	55.9%	38.9%
Fall 1999	48.7%	56.5%	43.9%	48.2%	45.2%	51.4%	58.8%	58.9%	50.6%
Change	-1.6%	1.8%	-3.6%	3.5%	-1.0%	-4.4%	7.9%	3.0%	11.7%
	Asian Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54***	Math 100	Math 104	Math 116	Math 119**	Math 121	Math 141**
Fall 1996	71.9%	65.9%	62.6%	53.6%	48.9%	58.9%	50.0%	56.5%	35.5%
Fall 1999	48.2%	61.8%	47.5%	50.2%	49.6%	54.8%	65.8%	68.1%	60.9%
Change	-23.7%	-4.1%	-15.1%	-3.4%	0.7%	-4.1%	15.8%	11.6%	25.4%
	Latino Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54 [†]	Math 100	Math 104	Math 116	Math 119	Math 121	Math 141*
Fall 1996	47.6%	51.5%	41.7%	39.4%	45.7%	42.3%	44.1%	32.4%	24.4%
Fall 1999	54.5%	53.8%	38.2%	39.6%	42.2%	45.8%	44.7%	47.5%	45.7%
Change	6.9%	2.3%	-3.5%	0.2%	-3.5%	3.5%	0.6%	15.1%	21.3%
	African American Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54 [†]	Math 100*	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	48.8%	42.8%	33.4%	27.6%	22.2%	35.6%	43.9%	45.5%	25.8%
Fall 1999	35.9%	48.6%	29.1%	36.5%	27.3%	51.2%	45.7%	35.3%	47.8%
Change	-12.9%	5.8%	-4.3%	8.9%	5.1%	15.6%	1.8%	-10.2%	22.0%
	Filipino Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54 [†]	Math 100	Math 104*	Math 116*	Math 119	Math 121	Math 141
Fall 1996	45.8%	69.3%	44.4%	50.3%	44.9%	59.5%	42.4%	50.0%	65.5%
Fall 1999	55.0%	63.3%	51.7%	52.7%	28.1%	36.2%	52.9%	57.6%	47.1%
Change	9.2%	-6.0%	7.3%	2.4%	-16.8%	-23.3%	10.5%	7.6%	-18.4%
	White Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32*	Math 35	Math 54 [†]	Math 100*	Math 104	Math 116	Math 119**	Math 121	Math 141*
Fall 1996	46.0%	59.4%	52.9%	48.2%	50.7%	59.7%	55.2%	65.6%	41.1%
Fall 1999	60.2%	62.3%	49.7%	53.3%	50.9%	56.4%	63.5%	61.4%	52.7%
Change	14.2%	2.9%	-3.2%	5.1%	0.2%	-3.3%	8.3%	-4.2%	11.6%

Note 1: Math 54 was replaced in 1999 by Math 95.

Note 2: Shaded columns reflect significant changes.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table D-11

Other Courses - THREE-YEAR CHANGE - Fall 1996 vs. Fall 1999

Total Course Success Rates		
	Biology 205	Spanish 102
Fall 1996	71.3%	68.1%
Fall 1999	76.4%	66.4%
Change	5.1%	-1.7%
Asian Course Success Rates		
	Biology 205	Spanish 102
Fall 1996	66.7%	71.4%
Fall 1999	83.9%	71.2%
Change	17.2%	-0.2%
Latino Course Success Rates		
	Biology 205	Spanish 102
Fall 1996	68.4%	77.8%
Fall 1999	70.6%	76.7%
Change	2.2%	-1.1%
African American Course Success Rates		
	Biology 205	Spanish 102
Fall 1996	61.9%	67.2%
Fall 1999	30.0%	65.1%
Change	-31.9%	-2.1%
Filipino Course Success Rates		
	Biology 205	Spanish 102**
Fall 1996	74.4%	57.7%
Fall 1999	70.4%	83.0%
Change	-4.0%	25.3%
White Course Success Rates		
	Biology 205	Spanish 102
Fall 1996	71.0%	66.0%
Fall 1999	81.7%	61.5%
Change	10.7%	-4.5%

Note: Shaded columns reflect significant changes.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table D-12

Change in Term Retention Rate by Ethnic Group
THREE-YEAR CHANGE - Fall 1996 vs. Fall 1999

Total Term Retention Rates		
	All District Students***	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹
Fall 1996	73.8%	86.8%
Fall 1999	78.3%	91.7%
Change	4.5%	4.9%
Asian Term Retention Rates		
	All District Asian Students	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹
Fall 1996	77.8%	90.7%
Fall 1999	78.8%	94.5%
Change	1.0%	3.8%
Latino Term Retention Rates		
	All District Latino Students***	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹
Fall 1996	74.6%	85.5%
Fall 1999	78.8%	91.1%
Change	4.2%	5.6%
African American Term Retention Rates		
	All District African American Students***	Students Enrolled in Prerequisite-enforced English or Math Courses** ¹
Fall 1996	69.4%	83.2%
Fall 1999	74.6%	87.5%
Change	5.2%	4.3%
Filipino Term Retention Rates		
	All District Filipino Students***	Students Enrolled in Prerequisite-enforced English or Math Courses* ¹
Fall 1996	76.3%	89.4%
Fall 1999	80.6%	92.6%
Change	4.3%	3.2%
White Term Retention Rates		
	All District White Students***	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹
Fall 1996	73.7%	86.7%
Fall 1999	78.6%	92.1%
Change	4.9%	5.4%

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

1. Unduplicated count of students enrolled in at least one of the

Note: Shaded columns reflect significant changes.

Table D-13

Change in Term-to-Term Persistence Rate by Ethnic Group
Students Enrolled in English and Math - THREE-YEAR CHANGE - Fall 1996 vs. Fall 1999

Total Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses*** ²
Fall 1996 to Spring 1997	79.6%	87.1%
Fall 1999 to Spring 2000	74.7%	82.4%
Change	-4.9%	-4.7%
Asian Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses*** ²
Fall 1996 to Spring 1997	86.1%	91.3%
Fall 1999 to Spring 2000	80.2%	85.6%
Change	-5.9%	-5.7%
Latino Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses** ²
Fall 1996 to Spring 1997	79.7%	87.6%
Fall 1999 to Spring 2000	73.4%	83.1%
Change	-6.3%	-4.5%
African American Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses** ²
Fall 1996 to Spring 1997	79.9%	89.4%
Fall 1999 to Spring 2000	73.5%	83.1%
Change	-6.4%	-6.3%
Filipino Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses ²
Fall 1996 to Spring 1997	79.2%	83.4%
Fall 1999 to Spring 2000	75.2%	80.4%
Change	-4.0%	-3.0%
White Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses** ²
Fall 1996 to Spring 1997	76.9%	85.3%
Fall 1999 to Spring 2000	73.1%	80.6%
Change	-3.8%	-4.7%

1. Unduplicated count of students enrolled in at least one of the 1997 prerequisite-enforced English or math courses examined in this report.

2. Unduplicated count of students successfully completing at least one of the 1997 prerequisite-enforced English or math courses examined in this report.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Note: Shaded columns reflect significant changes.

Appendix E

Long-term Impact of Prerequisite Enforcement on Underrepresented Students

FOUR-YEAR CHANGE – FALL 1996 vs. FALL 2000

Tables E-1 to E-13

Table E-1

Long-term Impact of Prerequisite Enforcement on Underrepresented Students

FOUR-YEAR CHANGE – FALL 1996 vs. FALL 2000

Impact on Course Enrollments

Districtwide – (Table E-2)

- From fall 1996 to fall 2000, total course enrollments grew from 108,034 to 112,470, a 4% increase.
- Only Latinos and whites had enrollment gains, +15% and +4% respectively.
- Asians, African Americans, and Filipinos had noticeable decreases in course enrollments (Asians, -7%; African Americans, -15%; Filipinos, -3%).

English Courses – (Table E-3)

- Total enrollments in the transfer level courses showed decreases from fall 1996 to fall 2000.
- Enrollments decreased in the reading courses (English 55, English 56), but increased in one of the writing courses (English 51).
- All ethnic groups had noticeable enrollment decreases in both of the reading courses (English 55, English 56) and in at least one of the two transfer level courses.
- With the exception of African Americans, all ethnic groups had enrollment increases in at least one of the writing courses (English 50, English 51).

Math Courses – (Table E-4)

- Total enrollments were down in the basic skills courses (Math 32, Math 35).
- African American enrollments decreased in all of the math courses listed.
- In contrast, Latinos had enrollment increases in all of the transfer level courses.
- Enrollment changes for Asians, Filipinos, and whites were mixed.

Other Courses – (Table E-5)

- Total student enrollments in Biology 205 and Spanish 102 decreased noticeably by 20% and 16% respectively.
- Filipinos had the largest course enrollment decreases in Biology 205 (-62%), followed by African Americans, (-48%); Asians, (-22%) and whites, (-11%). In contrast, Latino enrollments increased by 16%.

- For Spanish 102, all groups had noticeable enrollment decreases (Filipinos, -48%; African Americans, -22%; Latinos, -18%; Asians, -16%; whites, -16%).

Test of Statistical Significance – (Table E-6, Table E-7, Table E-8)

A statistical test of association (Chi-square analysis) was used to test the extent to which the distribution of ethnic course enrollments in fall 1996 differed from the distribution in fall 2000.

- Thirteen out of the nineteen courses assessed in this report had significant changes with regard to enrollment distributions by ethnic group.
- In particular, Asians and African Americans were the two primary groups contributing to the observed distributional changes.
- Asian enrollments decreased in English 10, English 50, English 55, English 101, English 105, Math 32, Math 35, Math 54, Math 100, and Math 116.
- African American enrollments decreased considerably in English 50, English 51, English 101, Math 32, Math 54, Math 100, Math 116, and Math 119.
- In contrast, Latino enrollments increased markedly in English 10, English 50, English 55, Math 32, and Math 116.

Impact on Successful Course Completion

English Courses – (Table E-9)

- In terms of changes in course success rate by ethnic group, there were three observations with significant increases: Asians, English 51; Latinos, English 101; and whites, English 101.
- In comparison, course success rates for African Americans significantly decreased in English 55.

Math Courses – (Table E-10)

- Total course success rates increased for three of the five transfer level courses (Math 119, Math 121, Math 141).
- Groups with statistically significant increases in course success rates included: Asians, (Math 119, Math 121, Math 141); Latinos, (Math 121); African Americans, (Math 104), and whites (Math 100, Math 119).
- African Americans in Math 32 had the only significant decrease in course success rate.

Other Courses – (Table E-11)

- Course success rate increases for Filipinos in Spanish 102 was the only observation found to be statistically significant.

Impact on Term Retention

Table E-12 shows the change in term retention rates between fall 1996 and fall 2000 for: (1) all district students and (2) students enrolled in at least one 1997 prerequisite-enforced English or math course.

- Overall, between fall 1996 and fall 2000, the data in Table E-12 show moderate increases in term retention rate.
- Term retention rates for the students in the first group ranged from 69% to 79%, while the rates for the second group were slightly higher, ranging from 83% to 94%.
- Thus, the data suggest a positive relationship between term retention and enrollment in prerequisite-enforced English and math courses.
- With the exception of one observation, comparisons of term retention rates between fall 1996 and fall 1999 by ethnic group revealed significant increases for all ethnic groups.

Impact on Term-to-Term Persistence

Table E-13 shows the impact of prerequisite enforcement (fall 1996 vs. fall 2000) on term-to-term persistence rates for: (1) students enrolled in at least one 1997 prerequisite-enforced English or math course and (2) students who successfully completed at least one 1997 prerequisite-enforced English or math course.

- The data in Table E-13 show term-to-term persistence rates for students in the first group ranging from 74% to 86% and slightly higher rates for students in the second group, ranging from 83% to 91%.
- These data also suggest that successful completion of a 1997 prerequisite-enforced English or math course is associated with higher rate of term-to-term persistence.
- Latinos, African Americans, and whites had significant decreases in term-to-term persistence rates between fall 1996 and fall 2000.

Table E-2

**Change in Course Enrollments by Ethnic Group
All District Courses - FOUR-YEAR CHANGE - Fall 1996 vs. Fall 2000**

Total Enrollments	
	All District Courses
Fall 1996	108,034
Fall 2000	112,470
Change	4,436
% Change	4.1%

Asian Enrollments	
	All District Courses
Fall 1996	15,159
Fall 2000	14,111
Change	-1,048
% Change	-6.9%

Latino Enrollments	
	All District Courses
Fall 1996	17,164
Fall 2000	19,831
Change	2,667
% Change	15.5%

African American	
	All District Courses
Fall 1996	13,722
Fall 2000	11,659
Change	-2,063
% Change	-15.0%

Filipino Enrollments	
	All District Courses
Fall 1996	7,222
Fall 2000	7,024
Change	-198
% Change	-2.7%

White Enrollments	
	All District Courses
Fall 1996	45,538
Fall 2000	47,465
Change	1,927
% Change	4.2%

Table E-3

Change in Course Enrollments by Ethnic Group
English Courses - FOUR-YEAR CHANGE - Fall 1996 vs. Fall 2000

	Total Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9 ¹	English 10 ²	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996		131	701	543	1372	1376	3224	469
Fall 2000		209	694	298	1654	859	2879	439
Change		78	-7	-245	282	-517	-345	-30
% Change		59.5%	-1.0%	-45.1%	20.6%	-37.6%	-10.7%	-6.4%
	Asian Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9 ¹	English 10 ²	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996		91	159	141	212	209	436	36
Fall 2000		104	126	64	286	180	327	25
Change		13	-33	-77	74	-29	-109	-11
% Change		14.3%	-20.8%	-54.6%	34.9%	-13.9%	-25.0%	-30.6%
	Latino Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9 ¹	English 10 ²	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996		23	161	131	370	351	540	84
Fall 2000		49	195	103	486	248	549	62
Change		26	34	-28	116	-103	9	-22
% Change		113.0%	21.1%	-21.4%	31.4%	-29.3%	1.7%	-26.2%
	African American Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9 ¹	English 10 ²	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996		NA	148	122	255	240	425	32
Fall 2000		NA	126	47	225	140	253	33
Change		NA	-22	-75	-30	-100	-172	1
% Change		NA	-14.9%	-61.5%	-11.8%	-41.7%	-40.5%	3.1%
	Filipino Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9 ¹	English 10 ²	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996		NA	47	40	104	130	251	23
Fall 2000		NA	47	16	122	64	232	19
Change		NA	0	-24	18	-66	-19	-4
% Change		NA	0.0%	-60.0%	17.3%	-50.8%	-7.6%	-17.4%
	White Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9 ¹	English 10 ²	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996		NA	147	81	348	344	1295	248
Fall 2000		NA	132	34	386	164	1189	240
Change		NA	-15	-47	38	-180	-106	-8
% Change		NA	-10.2%	-58.0%	10.9%	-52.3%	-8.2%	-3.2%

Note 1: English 9 was replaced by three courses in 2000: ESOL 30, ESOL 31, and ESOL 32.
 Thus, there is no comparable data.

Note 2: English 10 was replaced in 2000 by ESOL 40.

Note 3: NA - Not applicable because enrollment numbers were too small.

Table E-4
Change in Course Enrollments by Ethnic Group
Math Courses - FOUR-YEAR CHANGE - Fall 1996 vs. Fall 2000

	Total Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54¹	Math 100²	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	463	1343	2324	2112	543	563	1033	340	355
Fall 2000	440	1094	2335	1818	679	595	1031	297	377
Change	-23	-249	11	-294	136	32	-2	-43	22
% Change	-5.0%	-18.5%	0.5%	-13.9%	25.0%	5.7%	-0.2%	-12.6%	6.2%
	Asian Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54¹	Math 100²	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	32	129	270	293	88	107	136	69	76
Fall 2000	17	87	220	192	130	89	140	59	89
Change	-15	-42	-50	-101	42	-18	4	-10	13
% Change	-46.9%	-32.6%	-18.5%	-34.5%	47.7%	-16.8%	2.9%	-14.5%	17.1%
	Latino Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54¹	Math 100²	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	105	342	484	376	92	52	145	34	41
Fall 2000	141	304	530	354	104	90	154	44	49
Change	36	-38	46	-22	12	38	9	10	8
% Change	34.3%	-11.1%	9.5%	-5.9%	13.0%	73.1%	6.2%	29.4%	19.5%
	African American Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54¹	Math 100²	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	172	290	371	239	36	45	107	22	31
Fall 2000	119	212	276	168	35	33	65	17	22
Change	-53	-78	-95	-71	-1	-12	-42	-5	-9
% Change	-30.8%	-26.9%	-25.6%	-29.7%	-2.8%	-26.7%	-39.3%	-22.7%	-29.0%
	Filipino Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54¹	Math 100²	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	24	75	144	185	69	42	92	28	29
Fall 2000	12	56	149	120	73	58	100	21	42
Change	-12	-19	5	-65	4	16	8	-7	13
% Change	-50.0%	-25.3%	3.5%	-35.1%	5.8%	38.1%	8.7%	-25.0%	44.8%
	White Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54¹	Math 100²	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	100	416	875	848	225	273	471	157	141
Fall 2000	98	314	904	766	273	273	461	132	138
Change	-2	-102	29	-82	48	0	-10	-25	-3
% Change	-2.0%	-24.5%	3.3%	-9.7%	21.3%	0.0%	-2.1%	-15.9%	-2.1%

Note 1: Math 54 was replaced in 1999 by Math 95.

Note 2: Math 100 was replaced in 2000 by Math 96.

Table E-5

Change in Course Enrollments by Ethnic Group
Other Courses - FOUR-YEAR CHANGE - Fall 1996 vs. Fall 2000

Total Enrollments		
	Biology 205	Spanish 102
Fall 1996	230	765
Fall 2000	185	642
Change	-45	-123
% Change	-19.6%	-16.1%
Asian Enrollments		
	Biology 205	Spanish 102
Fall 1996	36	63
Fall 2000	28	53
Change	-8	-10
% Change	-22.2%	-15.9%
Latino Enrollments		
	Biology 205	Spanish 102
Fall 1996	19	144
Fall 2000	22	118
Change	3	-26
% Change	15.8%	-18.1%
African American Enrollments		
	Biology 205	Spanish 102
Fall 1996	21	67
Fall 2000	11	52
Change	-10	-15
% Change	-47.6%	-22.4%
Filipino Enrollments		
	Biology 205	Spanish 102
Fall 1996	39	52
Fall 2000	15	27
Change	-24	-25
% Change	-61.5%	-48.1%
White Enrollments		
	Biology 205	Spanish 102
Fall 1996	100	365
Fall 2000	89	308
Change	-11	-57
% Change	-11.0%	-15.6%

Table E-6

Course Enrollment

Change in Ethnic Group Distributions

English Courses - FOUR-YEAR CHANGE - Fall 1996 vs. Fall 2000

English Courses - FOUR-YEAR CHANGE - Fall 1996 vs. Fall 2000											
		Native American	Asian	African American	White	Latino	Filipino	Other	Decline	Total N	
Non-native Speaker	English 9 ¹	Fall 1996	0.0%	61.5%	3.6%	10.4%	14.9%	2.7%	5.0%	1.8%	221
		Fall 2000	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
Basic Skills Level	English 10 ²	Fall 1996	0.0%	69.5%	0.8%	6.9%	17.6%	1.5%	3.1%	0.8%	131
		Fall 2000	0.0%	49.8%	3.8%	14.8%	23.4%	2.4%	5.7%	0.0%	209
		Change in % Points	0.0	-19.7	3.0	7.9	5.8	0.9	2.6	-0.8	
	% Change	0.0	-28.3	375.0	114.5	33.0	60.0	83.9	-100.0		
	Fall 1996	1.4%	22.7%	21.1%	21.0%	23.0%	6.7%	2.1%	2.0%	701	
	Fall 2000	0.6%	18.2%	18.2%	19.0%	28.1%	6.8%	6.3%	2.9%	694	
Associate Degree Level	English 55 ^{***}	Change in % Points	-0.8	-4.5	-2.9	-2.0	5.1	0.1	4.2	0.9	
		% Change	-57.1	-19.8	-13.7	-9.5	22.2	1.5	200.0	45.0	
		Fall 1996	1.1%	26.0%	22.5%	14.9%	24.1%	7.4%	3.1%	0.9%	543
	Fall 2000	1.7%	21.5%	15.8%	11.4%	34.6%	5.4%	7.0%	2.7%	298	
	Change in % Points	0.6	-4.5	-6.7	-3.5	10.5	-2.0	3.9	1.8		
	% Change	54.5	-17.3	-29.8	-23.5	43.6	-27.0	125.8	200.0		
Transfer Level	English 51 ^{***}	Fall 1996	1.2%	15.5%	18.6%	25.4%	27.0%	7.6%	3.1%	1.7%	1,372
		Fall 2000	0.6%	17.3%	13.6%	23.3%	29.4%	7.4%	5.6%	2.8%	1,654
		Change in % Points	-0.6	1.8	-5.0	-2.1	2.4	-0.2	2.5	1.1	
	% Change	-50.0	11.6	-26.9	-8.3	8.9	-2.6	80.6	64.7		
	Fall 1996	1.7%	15.2%	17.4%	25.0%	25.5%	9.4%	3.6%	2.0%	1,376	
	Fall 2000	0.5%	21.0%	16.3%	19.1%	28.9%	7.5%	4.4%	2.4%	859	
Transfer Level	English 56 ^{***}	Change in % Points	-1.2	5.8	-1.1	-5.9	3.4	-1.9	0.8	0.4	
		% Change	-70.6	38.2	-6.3	-23.6	13.3	-20.2	22.2	20.0	
		Fall 1996	1.4%	13.5%	13.2%	40.2%	16.7%	7.8%	3.2%	4.0%	3,224
	Fall 2000	1.1%	11.4%	8.8%	41.3%	19.1%	8.1%	5.2%	5.1%	2,879	
	Change in % Points	-0.3	-2.1	-4.4	1.1	2.4	0.3	2.0	1.1		
	% Change	-21.4	-15.6	-33.3	2.7	14.4	3.8	62.5	27.5		
Transfer Level	English 101 ^{***}	Fall 1996	1.7%	7.7%	6.8%	52.9%	17.9%	4.9%	1.9%	6.2%	469
		Fall 2000	0.7%	5.7%	7.5%	54.7%	14.1%	4.3%	5.5%	7.5%	439
	Change in % Points	-1.0	-2.0	0.7	1.8	-3.8	-0.6	3.6	1.3		
	% Change	-58.8	-26.0	10.3	3.4	-21.2	-12.2	189.5	21.0		

Note 1: English 9 was replaced by three courses in 2000: ESOL 30, ESOL 31, and ESOL 32.

Thus, there is no comparable data.

Note 2: English 10 was replaced in 2000 by ESOL 40.

Note 3: Shaded rows reflect significant changes.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table E-6

Course Enrollment
Change in Ethnic Group Distributions
English Courses - FOUR-YEAR CHANGE - Fall 1996 vs. Fall 2000

English Courses - FOUR-YEAR CHANGE - Fall 1996 vs. Fall 2000																			
		Native American		Asian		African American		White		Latino		Filipino		Other		Decline		Total N	
Non-native Speaker	English 9 ¹	Fall 1996	0.0%	61.5%	3.6%	10.4%	14.9%	2.7%	5.0%	1.8%	221								
		Fall 2000	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0								
Basic Skills Level	English 10 ^{*2}	Fall 1996	0.0%	69.5%	0.8%	6.9%	17.6%	1.5%	3.1%	0.8%	131								
		Fall 2000	0.0%	49.8%	3.8%	14.8%	23.4%	2.4%	5.7%	0.0%	209								
		Change in % Points	0.0	-19.7	3.0	7.9	5.8	0.9	2.6	-0.8									
		% Change	0.0	-28.3	375.0	114.5	33.0	60.0	83.9	-100.0									
	English 50 ^{***}	Fall 1996	1.4%	22.7%	21.1%	21.0%	23.0%	6.7%	2.1%	2.0%	701								
		Fall 2000	0.6%	18.2%	18.2%	19.0%	28.1%	6.8%	6.3%	2.9%	694								
		Change in % Points	-0.8	-4.5	-2.9	-2.0	5.1	0.1	4.2	0.9									
		% Change	-57.1	-19.8	-13.7	-9.5	22.2	1.5	200.0	45.0									
	English 55 ^{***}	Fall 1996	1.1%	26.0%	22.5%	14.9%	24.1%	7.4%	3.1%	0.9%	543								
		Fall 2000	1.7%	21.5%	15.8%	11.4%	34.6%	5.4%	7.0%	2.7%	298								
Associate Degree Level	English 51 ^{***}		Change in % Points	0.6	-4.5	-6.7	-3.5	10.5	-2.0	3.9	1.8								
			% Change	54.5	-17.3	-29.8	-23.5	43.6	-27.0	125.8	200.0								
		Fall 1996	1.2%	15.5%	18.6%	25.4%	27.0%	7.6%	3.1%	1.7%	1,372								
		Fall 2000	0.6%	17.3%	13.6%	23.3%	29.4%	7.4%	5.6%	2.8%	1,654								
	English 56 ^{***}		Change in % Points	-0.6	1.8	-5.0	-2.1	2.4	-0.2	2.5	1.1								
			% Change	-50.0	11.6	-26.9	-8.3	8.9	-2.6	80.6	64.7								
		Fall 1996	1.7%	15.2%	17.4%	25.0%	25.5%	9.4%	3.6%	2.0%	1,376								
		Fall 2000	0.5%	21.0%	16.3%	19.1%	28.9%	7.5%	4.4%	2.4%	859								
	English 101 ^{***}		Change in % Points	-1.2	5.8	-1.1	-5.9	3.4	-1.9	0.8	0.4								
			% Change	-70.6	38.2	-6.3	-23.6	13.3	-20.2	22.2	20.0								
Transfer Level		Fall 1996	1.4%	13.5%	13.2%	40.2%	16.7%	7.8%	3.2%	4.0%	3,224								
		Fall 2000	1.1%	11.4%	8.8%	41.3%	19.1%	8.1%	5.2%	5.1%	2,879								
	English 105 [*]		Change in % Points	-0.3	-2.1	-4.4	1.1	2.4	0.3	2.0	1.1								
			% Change	-21.4	-15.6	-33.3	2.7	14.4	3.8	62.5	27.5								
		Fall 1996	1.7%	7.7%	6.8%	52.9%	17.9%	4.9%	1.9%	6.2%	469								
		Fall 2000	0.7%	5.7%	7.5%	54.7%	14.1%	4.3%	5.5%	7.5%	439								
		Change in % Points	-1.0	-2.0	0.7	1.8	-3.8	-0.6	3.6	1.3									
	% Change	-58.8	-26.0	10.3	3.4	-21.2	-12.2	189.5	21.0										

Note 1: English 9 was replaced by three courses in 2000: ESOL 30, ESOL 31, and ESOL 32.

Thus, there is no comparable data.

Note 2: English 10 was replaced in 2000 by ESOL 40.

Note 3: Shaded rows reflect significant changes.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table E-7.1

Course Enrollment
Change in Ethnic Group Distributions

FOUR-YEAR CHANGE, Fall 1996 vs. Fall 2000

		Native American	Asian	African American	White	Latino	Filipino	Other	Decline	Total N
Basic Skills Level	Math 32***									
	Fall 1996	1.1%	6.9%	37.1%	21.6%	22.7%	5.2%	3.5%	1.9%	463
	Fall 2000	1.1%	3.9%	27.0%	22.3%	32.0%	2.7%	9.1%	1.8%	440
	Change in % Points	0.0	-3.0	-10.1	0.7	9.3	-2.5	5.6	-0.1	
	% Change	0.0	-43.5	-27.2	3.2	41.0	-48.1	160.0	-5.3	
	Math 35***									
Associate Degree Level	Fall 1996	1.5%	9.6%	21.6%	31.0%	25.5%	5.6%	3.2%	2.1%	1,343
	Fall 2000	0.9%	8.0%	19.4%	28.7%	27.8%	5.1%	6.7%	3.5%	1,094
	Change in % Points	-0.6	-1.6	-2.2	-2.3	2.3	-0.5	3.5	1.4	
	% Change	0.0	-16.7	-10.2	-7.4	9.0	-8.9	109.4	66.7	
	Math 54*** ¹									
	Fall 1996	1.2%	11.6%	16.0%	37.7%	20.8%	6.2%	3.1%	3.5%	2,324
	Fall 2000	1.0%	9.4%	11.8%	38.7%	22.7%	6.4%	5.3%	4.6%	2,335
	Change in % Points	-0.2	-2.2	-4.2	1.0	1.9	0.2	2.2	1.1	
	% Change	-16.7	-19.0	-26.3	2.7	9.1	3.2	71.0	31.4	
	Math 100*** ²									
	Fall 1996	1.4%	13.9%	11.3%	40.2%	17.8%	8.8%	2.3%	4.4%	2,112
	Fall 2000	1.1%	10.6%	9.2%	42.1%	19.5%	6.6%	5.3%	5.6%	1,818
	Change in % Points	-0.3	-3.3	-2.1	1.9	1.7	-2.2	3.0	1.2	
	% Change	-21.4	-23.7	-18.6	4.7	9.6	-25.0	130.4	27.3	

Note 1: Math 54 was replaced in 1999 by Math 95.

Note 2: Math 100 was replaced in 2000 by Math 96.

Note 3: Shaded rows reflect significant changes.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table E-7.2

Course Enrollment
Change in Ethnic Group Distributions
Math Courses (Transfer Level) - FOUR-YEAR CHANGE - Fall 1996 vs. Fall 2000

Transfer Level		Math Courses (Transfer Level) - FOUR-YEAR CHANGE - Fall 1996 vs. Fall 2000								Total N
		Native American	Asian	African American	White	Latino	Filipino	Other	Decline	
Math 104	Fall 1996	0.6%	16.2%	6.6%	41.4%	16.9%	12.7%	2.4%	3.1%	543
	Fall 2000	1.3%	19.1%	5.2%	40.2%	15.3%	10.8%	3.2%	4.9%	679
	Change in % Points	0.7	2.9	-1.4	-1.2	-1.6	-1.9	0.8	1.8	
	% Change	0.0	17.9	-21.2	-2.9	-9.5	-15.0	33.3	58.1	
Math 116***	Fall 1996	2.1%	19.0%	8.0%	48.5%	9.2%	7.5%	3.2%	2.5%	563
	Fall 2000	0.5%	15.0%	5.5%	45.9%	15.1%	9.7%	3.7%	4.5%	595
	Change in % Points	-1.6	-4.0	-2.5	-2.6	5.9	2.2	0.5	2.0	
	% Change	0.0	-21.1	-31.3	-5.4	64.1	29.3	15.6	80.0	
Math 119**	Fall 1996	1.3%	13.2%	10.4%	45.6%	14.0%	8.9%	2.6%	4.1%	1,033
	Fall 2000	0.7%	13.6%	6.3%	44.7%	14.9%	9.7%	5.0%	5.0%	1,031
	Change in % Points	-0.6	0.4	-4.1	-0.9	0.9	0.8	2.4	0.9	
	% Change	0.0	3.0	-39.4	-2.0	6.4	9.0	92.3	22.0	
Math 121	Fall 1996	1.2%	20.3%	6.5%	46.2%	10.0%	8.2%	3.8%	3.8%	340
	Fall 2000	0.7%	19.9%	5.7%	44.4%	14.8%	7.1%	4.4%	3.0%	297
	Change in % Points	-0.5	-0.4	-0.8	-1.8	4.8	-1.1	0.6	-0.8	
	% Change	-41.7	-2.0	-12.3	-3.9	48.0	-13.4	15.8	-21.1	
Math 141	Fall 1996	1.1%	21.4%	8.7%	39.7%	11.5%	8.2%	3.4%	5.9%	355
	Fall 2000	0.3%	23.6%	5.8%	36.6%	13.0%	11.1%	4.5%	5.0%	377
	Change in % Points	-0.8	2.2	-2.9	-3.1	1.5	2.9	1.1	-0.9	
	% Change	-72.7	10.3	-33.3	-7.8	13.0	35.4	32.4	-15.3	

Note 1: Math 54 was replaced in 1999 by Math 95.

Note 2: Math 100 was replaced in 2000 by Math 96.

Note 3: Shaded rows reflect significant changes.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table E-8

Course Enrollment
Change in Ethnic Group Distributions
Other Courses - FOUR-YEAR CHANGE - Fall 1996 vs. Fall 2000

	Native American	Asian	African American	White	Latino	Filipino	Other	Decline	Total N
Biology 205	Fall 1996	1.7%	15.7%	9.1%	43.5%	8.3%	17.0%	1.7%	230
	Fall 2000	1.1%	15.1%	5.9%	48.1%	11.9%	8.1%	4.9%	185
	Change in % Points	-0.6	-0.6	-3.2	4.6	3.6	-8.9	3.2	1.9
	% Change	0.0	-3.8	-35.2	10.6	43.4	-52.4	188.2	63.3
Spanish 102	Fall 1996	1.4%	8.2%	8.8%	47.7%	18.8%	6.8%	2.9%	765
	Fall 2000	2.2%	8.3%	8.1%	48.0%	18.4%	4.2%	4.8%	642
	Change in % Points	0.8	0.1	-0.7	0.3	-0.4	-2.6	1.9	0.7
	% Change	0.0	1.2	-8.0	0.6	-2.1	-38.2	65.5	13.0

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table E-9

English Courses - FOUR-YEAR CHANGE - Fall 1996 vs. Fall 2000

	Total Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55*	English 51*	English 56	English 101***	English 105
Fall 1996		64.1%	51.4%	52.9%	42.8%	62.1%	53.2%	54.8%
Fall 2000		59.3%	57.1%	61.4%	47.0%	60.9%	59.3%	55.6%
Change		-4.8%	5.7%	8.5%	4.2%	-1.2%	6.1%	0.8%
	Asian Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51**	English 56	English 101	English 105
Fall 1996		64.8%	50.9%	56.0%	34.0%	67.0%	58.9%	50.0%
Fall 2000		51.0%	60.3%	70.3%	48.3%	68.9%	62.1%	56.0%
Change		-13.8%	9.4%	14.3%	14.3%	1.9%	3.2%	6.0%
	Latino Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101**	English 105
Fall 1996		60.9%	47.2%	51.9%	42.2%	59.8%	47.0%	44.0%
Fall 2000		71.4%	56.4%	63.1%	45.5%	58.1%	53.7%	46.8%
Change		10.5%	9.2%	11.2%	3.3%	-1.7%	6.7%	2.8%
	African American Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55*	English 51	English 56	English 101	English 105
Fall 1996		NA	50.0%	57.4%	38.8%	59.2%	41.2%	56.3%
Fall 2000		NA	49.2%	40.4%	39.1%	55.0%	48.2%	36.4%
Change		NA	-0.8%	-17.0%	0.3%	-4.2%	7.0%	-19.9%
	Filipino Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996		NA	61.7%	45.0%	52.9%	60.0%	51.4%	56.5%
Fall 2000		NA	57.4%	62.5%	46.7%	54.7%	55.2%	52.6%
Change		NA	-4.3%	17.5%	-6.2%	-5.3%	3.8%	-3.9%
	White Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101**	English 105
Fall 1996		NA	55.8%	50.6%	46.3%	62.5%	59.5%	58.9%
Fall 2000		NA	60.6%	64.7%	53.1%	59.1%	64.3%	62.5%
Change		NA	4.8%	14.1%	6.8%	-3.4%	4.8%	3.6%

Note 1: English 9 was replaced by three courses in 2000: ESOL 30, ESOL 31, and ESOL 32.

Thus, there is no comparable data.

Note 2: English 10 was replaced in 2000 by ESOL 40.

Note 3: NA - Not applicable because enrollment numbers were too small.

Note 4: Shaded columns reflect significant changes.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table E-10

Math Courses - FOUR-YEAR CHANGE - Fall 1996 vs. Fall 2000

	Total Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54 ¹	Math 100 ^{***2}	Math 104	Math 116	Math 119 ^{**}	Math 121 ^{***}	Math 141 ^{**}
Fall 1996	50.3%	54.7%	47.5%	44.7%	46.2%	55.8%	50.9%	55.9%	38.9%
Fall 2000	48.0%	52.4%	48.3%	52.4%	46.2%	58.3%	57.6%	68.7%	48.8%
Change	-2.3%	-2.3%	0.8%	7.7%	0.0%	2.5%	6.7%	12.8%	9.9%
	Asian Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54 ¹	Math 100 ²	Math 104	Math 116	Math 119 ^{**}	Math 121 [*]	Math 141 ^{**}
Fall 1996	71.9%	65.9%	62.6%	53.6%	48.9%	58.9%	50.0%	56.5%	35.5%
Fall 2000	47.1%	58.6%	57.3%	56.8%	47.7%	61.8%	67.1%	76.3%	57.3%
Change	-24.8%	-7.3%	-5.3%	3.2%	-1.2%	2.9%	17.1%	19.8%	21.8%
	Latino Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54 ¹	Math 100 ²	Math 104	Math 116	Math 119	Math 121 [*]	Math 141
Fall 1996	47.6%	51.5%	41.7%	39.4%	45.7%	42.3%	44.1%	32.4%	24.4%
Fall 2000	51.8%	53.3%	43.4%	46.0%	44.2%	53.3%	42.9%	59.1%	38.8%
Change	4.2%	1.8%	1.7%	6.6%	-1.5%	11.0%	-1.2%	26.7%	14.4%
	African American Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32 ^{**}	Math 35	Math 54 ¹	Math 100 ²	Math 104 ^{***}	Math 116	Math 119	Math 121	Math 141
Fall 1996	48.8%	42.8%	33.4%	27.6%	22.2%	35.6%	43.9%	45.5%	25.8%
Fall 2000	33.6%	35.8%	29.0%	41.7%	60.0%	54.5%	55.4%	52.9%	18.2%
Change	-15.2%	-7.0%	-4.4%	14.1%	37.8%	18.9%	11.5%	7.4%	-7.6%
	Filipino Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54 ¹	Math 100 ²	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	45.8%	69.3%	44.4%	50.3%	44.9%	59.5%	42.4%	50.0%	65.5%
Fall 2000	66.7%	76.8%	47.0%	53.3%	37.0%	46.6%	49.0%	66.7%	54.8%
Change	20.9%	7.5%	2.6%	3.0%	-7.9%	-12.9%	6.6%	16.7%	-10.7%
	White Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54 ¹	Math 100 ^{***2}	Math 104	Math 116	Math 119 ^{**}	Math 121	Math 141
Fall 1996	46.0%	59.4%	52.9%	48.2%	50.7%	59.7%	55.2%	65.6%	41.1%
Fall 2000	58.2%	58.6%	54.3%	56.5%	46.9%	61.5%	62.3%	75.8%	47.8%
Change	12.2%	-0.8%	1.4%	8.3%	-3.8%	1.8%	7.1%	10.2%	6.7%

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Note 1: Math 54 was replaced in 1999 by Math 95.

Note 2: Math 100 was replaced in 2000 by Math 96.

Table E-11

Other Courses - **FOUR-YEAR CHANGE** - Fall 1996 vs. Fall 2000

Total Course Success Rates		
	Biology 205	Spanish 102
Fall 1996	71.3%	68.1%
Fall 2000	72.4%	72.0%
Change	1.1%	3.9%
Asian Course Success Rates		
	Biology 205	Spanish 102
Fall 1996	66.7%	71.4%
Fall 2000	75.0%	67.9%
Change	8.3%	-3.5%
Latino Course Success Rates		
	Biology 205	Spanish 102
Fall 1996	68.4%	77.8%
Fall 2000	72.7%	82.2%
Change	4.3%	4.4%
African American Course Success Rates		
	Biology 205	Spanish 102
Fall 1996	61.9%	67.2%
Fall 2000	45.5%	59.6%
Change	-16.4%	-7.6%
Filipino Course Success Rates		
	Biology 205	Spanish 102*
Fall 1996	74.4%	57.7%
Fall 2000	80.0%	85.2%
Change	5.6%	27.5%
White Course Success Rates		
	Biology 205	Spanish 102
Fall 1996	71.0%	66.0%
Fall 2000	75.3%	71.1%
Change	4.3%	5.1%

Note: Shaded columns reflect significant changes.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table E-12

Change in Term Retention Rate by Ethnic Group
FOUR-YEAR CHANGE - Fall 1996 vs. Fall 2000

Total Term Retention Rates		
	All District Students***	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹
Fall 1996	73.8%	86.8%
Fall 2000	78.2%	91.6%
Change	4.4%	4.8%
Asian Term Retention Rates		
	All District Asian Students*	Students Enrolled in Prerequisite-enforced English or Math Courses** ¹
Fall 1996	77.8%	90.7%
Fall 2000	79.4%	93.9%
Change	1.6%	3.2%
Latino Term Retention Rates		
	All District Latino Students***	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹
Fall 1996	74.6%	85.5%
Fall 2000	78.3%	91.3%
Change	3.7%	5.8%
African American Term Retention Rates		
	All District African American Students***	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹
Fall 1996	69.4%	83.2%
Fall 2000	73.8%	89.3%
Change	4.4%	6.1%
Filipino Term Retention Rates		
	All District Filipino Students*	Students Enrolled in Prerequisite-enforced English or Math Courses ¹
Fall 1996	76.3%	89.4%
Fall 2000	78.8%	91.4%
Change	2.5%	2.0%
White Term Retention Rates		
	All District White Students***	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹
Fall 1996	73.7%	86.7%
Fall 2000	78.7%	91.7%
Change	5.0%	5.0%

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

1. Unduplicated count of students enrolled in at least one of the

Note: Shaded columns reflect significant changes.

Table E-13

Change in Term-to-Term Persistence Rate by Ethnic Group
Students Enrolled in English and Math - FOUR-YEAR CHANGE - Fall 1996 vs. Fall 2000

Total Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses* ²
Fall 1996 to Spring 1997	79.6%	87.1%
Fall 2000 to Spring 2001	76.6%	85.5%
Change	-3.0%	-1.6%
Asian Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses ²
Fall 1996 to Spring 1997	86.1%	91.3%
Fall 2000 to Spring 2001	83.5%	89.5%
Change	-2.6%	-1.8%
Latino Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses ²
Fall 1996 to Spring 1997	79.7%	87.6%
Fall 2000 to Spring 2001	75.4%	86.4%
Change	-4.3%	-1.2%
African American Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses ²
Fall 1996 to Spring 1997	79.9%	89.4%
Fall 2000 to Spring 2001	73.9%	85.3%
Change	-6.0%	-4.1%
Filipino Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses ²
Fall 1996 to Spring 1997	79.2%	83.4%
Fall 2000 to Spring 2001	78.1%	86.6%
Change	-1.1%	3.2%
White Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses* ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses* ²
Fall 1996 to Spring 1997	76.9%	85.3%
Fall 2000 to Spring 2001	74.6%	82.9%
Change	-2.3%	-2.4%

1. Unduplicated count of students enrolled in at least one of the 1997 prerequisite-enforced English or math courses examined in this report.

2. Unduplicated count of students successfully completing at least one of the 1997 prerequisite-enforced English or math courses examined in this report.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Note: Shaded columns reflect significant changes.

Appendix F

Long-term Impact of Prerequisite Enforcement on Underrepresented Students

FIVE-YEAR CHANGE – FALL 1996 vs. FALL 2001

Tables F-1 to F-13

Table F-1

Long-term Impact of Prerequisite Enforcement on Underrepresented Students

FIVE-YEAR CHANGE – FALL 1996 vs. FALL 2001

Impact on Course Enrollments

Districtwide – (Table F-2)

- From fall 1996 to fall 2001, total course enrollments grew from 108,034 to 117,906, a 9% increase.
- Latinos had the largest enrollment gains (+22%), followed by whites (+6%) and Filipinos (+3%).
- In contrast, Asian and African American enrollments decreased by 2% and 14% respectively.

English Courses – (Table F-3)

- In general, total enrollments in the transfer level courses showed an increase since fall 1997, particularly for English 105.
- With the exception of English 51, enrollments decreased in courses at the associate degree level (English 56, -44%) and basic skills level (English 50, -3%; English 55, -42%).
- African American enrollments had decreased in all the English courses included in this study.
- Asian enrollments also decreased in all but two English courses.
- Overall, the results for the other groups were mixed.

Math Courses – (Table F-4)

- The data show decreased enrollments in the lower level courses (Math 32, -12%; Math 35, -11%, Math 100, -14%) and increased enrollments in the higher level courses (Math 104, +29%; Math 116, +2%, Math 119, +8%; Math 141, +17%).
- White enrollments also decreased in lower level courses and increased in higher level courses.
- Latino enrollments increased in all but one course.
- African American enrollments decreased in all of the math courses utilized in this study.
- Asian and Filipino enrollments decreased in most of the math courses.

Other Courses – (Table F-5)

- Total student enrollments in Biology 205 and Spanish 102 decreased by 22% and 27% respectively.
- Course enrollment decreases in Biology 205 were the largest for Asians (-42%) and African Americans (-43%).
- For Spanish 102, Filipinos, Asians, Latinos and African Americans had sizeable enrollment decreases (Filipinos, -65%; Asians, -56%; Latinos, -46%; African Americans, -39%).

Test of Statistical Significance – (Table F-6, Table F-7, Table F-8)

A statistical test of association (Chi-square analysis) was used to test the extent to which the distribution of ethnic course enrollments in fall 1996 differed from the distribution in fall 2001.

- Fourteen out of the nineteen courses assessed in this report had significant changes with regard to enrollment distributions of ethnic groups.
- As expected, Asians and African Americans were the two primary groups contributing to the observed distributional changes due to decreases in their total course enrollments (see Table F-2)
- Relative to the other ethnic groups, the proportion of African American enrollments decreased in all the courses included in this study.
- The proportion of Asian enrollments decreased in most of the courses.

Impact on Successful Course Completion

English Courses – (Table F-9)

- Between fall 1996 and fall 2001, there were notable increases in course success rates at the basic skills level, English 50 (Asians, Latinos, African Americans) and English 55 (Asians); associate degree level, English 51 (Asians, whites) and English 56 (Filipinos); transfer level, English 101 (all groups) and English 105 (Asians, Latinos).
- There were observable decreases in course success rates for Filipinos (English 50 and English 105) and African Americans (English 55 and English 105).
- When tested for statistical significance, only English 50 (Asian) and English 101 (Latino and White) had significant increases.

Math Courses – (Table F-10)

- Total course success rates increased for all but one of the transfer level courses (Math 116).
- Course success rates also increased for two of the four courses at the associate degree and basic skills levels (Math 100 and Math 32).
- All ethnic groups had increased course success rates in at least five of the nine math courses reviewed.

- Groups with statistically significant increases in course success rates included Asians, (Math 121, Math 141); Latinos, (Math 141); Filipinos, (Math 54), and whites (Math 32, Math 100, Math 141).

Other Courses – (Table F-11)

- The data provided in Table F-11 show an increase in total course success rate for only Biology 205.
- Total course success rates for Spanish 102 remained relatively unchanged.
- Course success rates for Asians, Latinos, African Americans, and whites had increased in Biology 205, while the success rates for African Americans decreased in Spanish 102.
- Course success rate increases for Asians and whites in Biology 205 were found to be statistically significant.

Impact on Term Retention

Table F-12 shows the change in term retention rates between fall 1996 and fall 2001 for: (1) all district students and (2) students enrolled in at least one 1997 prerequisite-enforced English or math course.

- Between fall 1996 and fall 2001, the data in Table F-12 show increases in term retention rate for all groups.
- Term retention rates for the students in the first group ranged from 69% to 80%, while the rates for the second group were slightly higher, ranging from 83% to 94%.
- Thus, the data suggest a positive relationship between term retention and enrollment in prerequisite-enforced English and math courses.
- With the exception of Asians, comparisons of term retention rates between fall 1996 and fall 2001 by ethnic group revealed significant increases for all ethnic groups.

Impact on Term-to-Term Persistence

Table F-13 shows the impact of prerequisite enforcement (fall 1996 vs. fall 2001) on term-to-term persistence rates for: (1) students enrolled in at least one 1997 prerequisite-enforced English or math course and (2) students who successfully completed at least one 1997 prerequisite-enforced English or math course.

- The data in Table F-13 show term-to-term persistence rates for students in the first group ranging from 74% to 86% and slightly higher rates for students in the second group, ranging from 83% to 91%.
- These data also suggest that successful completion of a 1997 prerequisite-enforced English or math courses is associated with higher rate of term-to-term persistence.
- With the exception of Filipinos, all groups showed statistically significant decreases in term-to-term persistence rates between fall 1996 and fall 2001.

Table F-2

Change in Course Enrollments by Ethnic Group
All District Courses - FIVE-YEAR CHANGE - Fall 1996 vs. Fall 2001

Total Enrollments	
	All District Courses
Fall 1996	108,034
Fall 2001	117,906
Change	9,872
% Change	9.1%

Asian Enrollments	
	All District Courses
Fall 1996	15,159
Fall 2001	14,802
Change	-357
% Change	-2.4%

Latino Enrollments	
	All District Courses
Fall 1996	17,164
Fall 2001	21,065
Change	3,901
% Change	22.7%

African American	
	All District Courses
Fall 1996	13,722
Fall 2001	11,764
Change	-1,958
% Change	-14.3%

Filipino Enrollments	
	All District Courses
Fall 1996	7,222
Fall 2001	7,415
Change	193
% Change	2.7%

White Enrollments	
	All District Courses
Fall 1996	45,538
Fall 2001	48,425
Change	2,887
% Change	6.3%

Table F-3

Change in Course Enrollments by Ethnic Group
English Courses - FIVE-YEAR CHANGE - Fall 1996 vs. Fall 2001

	Total Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9 ¹	English 10 ²	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996		131	701	543	1372	1376	3224	469
Fall 2001		149	681	317	1666	765	3039	507
Change		18	-20	-226	294	-611	-185	38
% Change		13.7%	-2.9%	-41.6%	21.4%	-44.4%	-5.7%	8.1%
	Asian Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9 ¹	English 10 ²	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996		91	159	141	212	209	436	36
Fall 2001		61	126	55	310	177	383	36
Change		-30	-33	-86	98	-32	-53	0
% Change		-33.0%	-20.8%	-61.0%	46.2%	-15.3%	-12.2%	0.0%
	Latino Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9 ¹	English 10 ²	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996		23	161	131	370	351	540	84
Fall 2001		45	182	91	467	212	555	79
Change		22	21	-40	97	-139	15	-5
% Change		95.7%	13.0%	-30.5%	26.2%	-39.6%	2.8%	-6.0%
	African American Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9 ¹	English 10 ²	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996		NA	148	122	255	240	425	32
Fall 2001		NA	129	68	209	110	254	27
Change		NA	-19	-54	-46	-130	-171	-5
% Change		NA	-12.8%	-44.3%	-18.0%	-54.2%	-40.2%	-15.6%
	Filipino Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9 ¹	English 10 ²	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996		NA	47	40	104	130	251	23
Fall 2001		NA	54	21	130	54	235	27
Change		NA	7	-19	26	-76	-16	4
% Change		NA	14.9%	-47.5%	25.0%	-58.5%	-6.4%	17.4%
	White Enrollments							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9 ¹	English 10 ²	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996		NA	147	81	348	344	1295	248
Fall 2001		NA	119	46	383	136	1238	269
Change		NA	-28	-35	35	-208	-57	21
% Change		NA	-19.0%	-43.2%	10.1%	-60.5%	-4.4%	8.5%

Note 1: English 9 was replaced by three courses in 2000: ESOL 30, ESOL 31, and ESOL 32.

Thus, there is no comparable data.

Note 2: English 10 was replaced in 2000 by ESOL 40.

Note 3: NA - Not applicable because enrollment numbers were too small.

Table F-4
Change in Course Enrollments by Ethnic Group
Math Courses - FIVE-YEAR CHANGE - Fall 1996 vs. Fall 2001

	Total Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54¹	Math 100²	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	463	1343	2324	2112	543	563	1033	340	355
Fall 2001	405	1197	2455	1806	701	573	1123	291	415
Change	-58	-146	131	-306	158	10	90	-49	60
% Change	-12.5%	-10.9%	5.6%	-14.5%	29.1%	1.8%	8.7%	-14.4%	16.9%
	Asian Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54¹	Math 100²	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	32	129	270	293	88	107	136	69	76
Fall 2001	31	106	250	197	154	83	165	53	91
Change	-1	-23	-20	-96	66	-24	29	-16	15
% Change	-3.1%	-17.8%	-7.4%	-32.8%	75.0%	-22.4%	21.3%	-23.2%	19.7%
	Latino Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54¹	Math 100²	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	105	342	484	376	92	52	145	34	41
Fall 2001	133	346	493	362	110	80	161	38	58
Change	28	4	9	-14	18	28	16	4	17
% Change	26.7%	1.2%	1.9%	-3.7%	19.6%	53.8%	11.0%	11.8%	41.5%
	African American Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54¹	Math 100²	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	172	290	371	239	36	45	107	22	31
Fall 2001	92	209	273	151	27	30	77	17	24
Change	-80	-81	-98	-88	-9	-15	-30	-5	-7
% Change	-46.5%	-27.9%	-26.4%	-36.8%	-25.0%	-33.3%	-28.0%	-22.7%	-22.6%
	Filipino Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54¹	Math 100²	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	24	75	144	185	69	42	92	28	29
Fall 2001	16	58	178	132	63	41	88	25	43
Change	-8	-17	34	-53	-6	-1	-4	-3	14
% Change	-33.3%	-22.7%	23.6%	-28.6%	-8.7%	-2.4%	-4.3%	-10.7%	48.3%
	White Enrollments								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54¹	Math 100²	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	100	416	875	848	225	273	471	157	141
Fall 2001	80	348	984	759	260	273	509	121	154
Change	-20	-68	109	-89	35	0	38	-36	13
% Change	-20.0%	-16.3%	12.5%	-10.5%	15.6%	0.0%	8.1%	-22.9%	9.2%

Note 1: Math 54 was replaced in 1999 by Math 95.

Note 2: Math 100 was replaced in 2000 by Math 96.

Table F-5

Change in Course Enrollments by Ethnic Group
Other Courses - FIVE-YEAR CHANGE - Fall 1996 vs. Fall 2001

Total Enrollments		
	Biology 205	Spanish 102
Fall 1996	230	765
Fall 2001	180	561
Change	-50	-204
% Change	-21.7%	-26.7%
Asian Enrollments		
	Biology 205	Spanish 102
Fall 1996	36	63
Fall 2001	21	28
Change	-15	-35
% Change	-41.7%	-55.6%
Latino Enrollments		
	Biology 205	Spanish 102
Fall 1996	19	144
Fall 2001	15	77
Change	-4	-67
% Change	-21.1%	-46.5%
African American Enrollments		
	Biology 205	Spanish 102
Fall 1996	21	67
Fall 2001	12	41
Change	-9	-26
% Change	-42.9%	-38.8%
Filipino Enrollments		
	Biology 205	Spanish 102
Fall 1996	39	52
Fall 2001	30	18
Change	-9	-34
% Change	-23.1%	-65.4%
White Enrollments		
	Biology 205	Spanish 102
Fall 1996	100	365
Fall 2001	88	324
Change	-12	-41
% Change	-12.0%	-11.2%

Table F-6

Course Enrollment
Change in Ethnic Group Distributions
English Courses - FIVE-YEAR CHANGE - Fall 1996 vs. Fall 2001

			Native American	Asian	African American	White	Latino	Filipino	Other	Decline	Total N
Non-native Speaker	English 9 ¹	Fall 1996	0.0%	61.5%	3.6%	10.4%	14.9%	2.7%	5.0%	1.8%	221
		Fall 2001	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
Basic Skills Level	English 10 ²	Fall 1996	0.0%	69.5%	0.8%	6.9%	17.6%	1.5%	3.1%	0.8%	131
		Fall 2001	0.0%	40.9%	0.7%	14.8%	30.2%	2.7%	10.7%	0.0%	149
		Change in % Points	0.0	-28.6	-0.1	7.9	12.6	1.2	7.6	-0.8	
	English 50 ^{**}	% Change	0.0	-41.2	-12.5	114.5	71.6	80.0	245.2	-100.0	
		Fall 1996	1.4%	22.7%	21.1%	21.0%	23.0%	6.7%	2.1%	2.0%	701
		Fall 2001	1.3%	18.5%	18.9%	17.5%	26.7%	7.9%	7.0%	2.1%	681
Associate Degree Level	English 55 ^{**}	Change in % Points	-0.1	-4.2	-2.2	-3.5	3.7	1.2	4.9	0.1	
		% Change	-7.1	-18.5	-10.4	-16.7	16.1	17.9	233.3	5.0	
		Fall 1996	1.1%	26.0%	22.5%	14.9%	24.1%	7.4%	3.1%	0.9%	543
	English 51 ^{**}	Fall 2001	0.6%	17.4%	21.5%	14.5%	28.7%	6.6%	7.9%	2.8%	317
		Change in % Points	-0.5	-8.6	-1.0	-0.4	4.6	-0.8	4.8	1.9	
		% Change	-45.5	-33.1	-4.4	-2.7	19.1	-10.8	154.8	211.1	
Transfer Level	English 56 ^{**}	Fall 1996	1.2%	15.5%	18.6%	25.4%	27.0%	7.6%	3.1%	1.7%	1,372
		Fall 2001	1.4%	18.6%	12.5%	23.0%	28.0%	7.8%	5.9%	2.7%	1,666
		Change in % Points	0.2	3.1	-6.1	-2.4	1.0	0.2	2.8	1.0	
	English 101 ^{**}	% Change	16.7	20.0	-32.8	-9.4	3.7	2.6	90.3	58.8	
		Fall 1996	1.7%	15.2%	17.4%	25.0%	25.5%	9.4%	3.6%	2.0%	1,376
		Fall 2001	0.9%	23.1%	14.4%	17.8%	27.7%	7.1%	6.3%	2.7%	765
English 105 ^{**}	English 105 ^{**}	Change in % Points	-0.8	7.9	-3.0	-7.2	2.2	-2.3	2.7	0.7	
		% Change	-47.1	52.0	-17.2	-28.8	8.6	-24.5	75.0	35.0	
		Fall 1996	1.4%	13.5%	13.2%	40.2%	16.7%	7.8%	3.2%	4.0%	3,224
	English 105 ^{**}	Fall 2001	1.2%	12.6%	8.4%	40.7%	18.3%	7.7%	5.6%	5.5%	3,039
		Change in % Points	-0.2	-0.9	-4.8	0.5	1.6	-0.1	2.4	1.5	
		% Change	-14.3	-6.7	-36.4	1.2	9.6	-1.3	75.0	37.5	
English 105 ^{**}	English 105 ^{**}	Fall 1996	1.7%	7.7%	6.8%	52.9%	17.9%	4.9%	1.9%	6.2%	469
		Fall 2001	0.8%	7.1%	5.3%	53.1%	15.6%	5.3%	4.5%	8.3%	507
		Change in % Points	-0.9	-0.6	-1.5	0.2	-2.3	0.4	2.6	2.1	
	English 105 ^{**}	% Change	-52.9	-7.8	-22.1	0.4	-12.8	8.2	136.8	33.9	

Note 1: English 9 was replaced by three courses in 2000: ESOL 30, ESOL 31, and ESOL 32.

Thus, there is no comparable data.

Note 2: English 10 was replaced in 2000 by ESOL 40.

Note 3: Shaded rows reflect significant changes.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table F-7.1

**Course Enrollment
Change in Ethnic Group Distributions**

FIVE-YEAR CHANGE, Fall 1996 vs. Fall 2001

		Native American	Asian	African American	White	Latino	Filipino	Other	Decline	Total N
Basic Skills Level	Math 32**									
	Fall 1996	1.1%	6.9%	37.1%	21.6%	22.7%	5.2%	3.5%	1.9%	463
	Fall 2001	0.5%	7.7%	22.7%	19.8%	32.8%	4.0%	9.9%	2.7%	405
	Change in % Points	-0.6	0.8	-14.4	-1.8	10.1	-1.2	6.4	0.8	
	% Change	0.0	11.6	-38.8	-8.3	44.5	-23.1	182.9	42.1	
	Math 35**									
Associate Degree Level	Fall 1996	1.5%	9.6%	21.6%	31.0%	25.5%	5.6%	3.2%	2.1%	1,343
	Fall 2001	1.3%	8.9%	17.5%	29.1%	28.9%	4.8%	5.8%	3.8%	1,197
	Change in % Points	-0.2	-0.7	-4.1	-1.9	3.4	-0.8	2.6	1.7	
	% Change	0.0	-7.3	-19.0	-6.1	13.3	-14.3	81.3	81.0	
	Math 54**1									
	Fall 1996	1.2%	11.6%	16.0%	37.7%	20.8%	6.2%	3.1%	3.5%	2,324
Math 100**2	Fall 2001	1.5%	10.2%	11.1%	40.1%	20.1%	7.3%	5.2%	4.5%	2,455
	Change in % Points	0.3	-1.4	-4.9	2.4	-0.7	1.1	2.1	1.0	
	% Change	25.0	-12.1	-30.6	6.4	-3.4	17.7	67.7	28.6	
	Fall 1996	1.4%	13.9%	11.3%	40.2%	17.8%	8.8%	2.3%	4.4%	2,112
	Fall 2001	1.2%	10.9%	8.4%	42.0%	20.0%	7.3%	5.1%	5.0%	0
	Change in % Points	-0.2	-3.0	-2.9	1.8	2.2	-1.5	2.8	0.6	
	% Change	-14.3	-21.6	-25.7	4.5	12.4	-17.0	121.7	13.6	

Note 1: Math 54 was replaced in 1999 by Math 95.

Note 2: Math 100 was replaced in 2000 by Math 96.

Note 3: Shaded rows reflect significant changes.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table F-7.2

Course Enrollment

Change in Ethnic Group Distributions

Math Courses (Transfer Level) - FIVE-YEAR CHANGE - Fall 1996 vs. Fall 2001

Main Courses (Transfer Level) - Five-Year Change - Fall 1996 vs. Fall 2001																	
		Native American		Asian American		White		Latino		Filipino		Other		Decline		Total N	
Transfer Level	Math 104**	Fall 1996	0.6%	16.2%	6.6%	41.4%	16.9%	12.7%	2.4%	543	3.1%						
		Fall 2001	0.9%	22.0%	3.9%	37.1%	15.7%	9.0%	5.6%	701	6.0%						
		Change in % Points	0.3	5.8	-2.7	-4.3	-1.2	-3.7	3.2	2.9							
		% Change	0.0	35.8	-40.9	-10.4	-7.1	-29.1	133.3	93.5							
		Fall 1996	2.1%	19.0%	8.0%	48.5%	9.2%	7.5%	3.2%	563	2.5%						
	Math 116**	Fall 2001	1.0%	14.5%	5.2%	47.6%	14.0%	7.2%	5.2%	573	5.2%						
		Change in % Points	-1.1	-4.5	-2.8	-0.9	4.8	-0.3	2.0	2.7							
		% Change	0.0	-23.7	-35.0	-1.9	52.2	-4.0	62.5	108.0							
		Fall 1996	1.3%	13.2%	10.4%	45.6%	14.0%	8.9%	2.6%	1,033	4.1%						
		Math 119*	Fall 2001	1.1%	14.7%	6.9%	45.3%	14.3%	7.8%	4.5%	1,123	5.3%					
Change in % Points	-0.2		1.5	-3.5	-0.3	0.3	-1.1	1.9	1.2								
% Change	0.0		11.4	-33.7	-0.7	2.1	-12.4	73.1	29.3								
Fall 1996	1.2%		20.3%	6.5%	46.2%	10.0%	8.2%	3.8%	340	3.8%							
Math 121	Fall 2001		0.7%	18.2%	5.8%	41.6%	13.1%	8.6%	4.8%	291	7.2%						
	Change in % Points	-0.5	-2.1	-0.7	-4.6	3.1	0.4	1.0	3.4								
	% Change	-41.7	-10.3	-10.8	-10.0	31.0	4.9	26.3	89.5								
	Fall 1996	1.1%	21.4%	8.7%	39.7%	11.5%	8.2%	3.4%	355	5.9%							
	Math 141	Fall 2001	0.2%	21.9%	5.8%	37.1%	14.0%	10.4%	5.3%	415	5.3%						
Change in % Points		-0.9	0.5	-2.9	-2.6	2.5	2.2	1.9	-0.6								
% Change		-81.8	2.3	-33.3	-6.5	21.7	26.8	55.9	-10.2								

Note 1: Math 54 was replaced in 1999 by Math 95.

Note 2: Math 100 was replaced in 2000 by Math 96.

Note 3: Shaded rows reflect significant changes.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table F-8

Course Enrollment
Change in Ethnic Group Distributions
Other Courses - FIVE-YEAR CHANGE - Fall 1996 vs. Fall 2001

		Native American	Asian	African American	White	Latino	Filipino	Other	Decline	Total N
Biology 205	Fall 1996	1.7%	15.7%	9.1%	43.5%	8.3%	17.0%	1.7%	3.0%	230
	Fall 2001	1.1%	11.7%	6.7%	48.9%	8.3%	16.7%	3.3%	3.3%	180
	Change in % Points	-0.6	-4.0	-2.4	5.4	0.0	-0.3	1.6	0.3	
Spanish 102**	% Change	0.0	-25.5	-26.4	12.4	0.0	-1.8	94.1	10.0	
	Fall 1996	1.4%	8.2%	8.8%	47.7%	18.8%	6.8%	2.9%	5.4%	765
	Fall 2001	1.6%	5.0%	7.3%	57.8%	13.7%	3.2%	4.1%	7.3%	561
	Change in % Points	0.2	-3.2	-1.5	10.1	-5.1	-3.6	1.2	1.9	
	% Change	0.0	-39.0	-17.0	21.2	-27.1	-52.9	41.4	35.2	

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Note: Shaded rows reflect significant changes.

Appendix F-8

Table F-9

English Courses - FIVE-YEAR CHANGE - Fall 1996 vs. Fall 2001

	Total Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50***	English 55	English 51	English 56	English 101***	English 105
Fall 1996		64.1%	51.4%	52.9%	42.8%	62.1%	53.2%	54.8%
Fall 2001		61.7%	60.9%	51.4%	43.8%	64.3%	59.7%	52.7%
Change		-2.4%	9.5%	-1.5%	1.0%	2.2%	6.5%	-2.1%
	Asian Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50*	English 55	English 51	English 56	English 101	English 105
Fall 1996		64.8%	50.9%	56.0%	34.0%	67.0%	58.9%	50.0%
Fall 2001		59.0%	65.9%	63.6%	39.4%	65.0%	62.9%	58.3%
Change		-5.8%	15.0%	7.6%	5.4%	-2.0%	4.0%	8.3%
	Latino Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101*	English 105
Fall 1996		60.9%	47.2%	51.9%	42.2%	59.8%	47.0%	44.0%
Fall 2001		55.6%	54.9%	51.6%	39.2%	60.4%	53.2%	46.8%
Change		-5.3%	7.7%	-0.3%	-3.0%	0.6%	6.2%	2.8%
	African American Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996		NA	50.0%	57.4%	38.8%	59.2%	41.2%	56.3%
Fall 2001		NA	58.9%	44.1%	41.6%	59.1%	46.9%	44.4%
Change		NA	8.9%	-13.3%	2.8%	-0.1%	5.7%	-11.9%
	Filipino Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101	English 105
Fall 1996		NA	61.7%	45.0%	52.9%	60.0%	51.4%	56.5%
Fall 2001		NA	44.3%	42.9%	47.7%	68.5%	60.0%	48.1%
Change		NA	-17.4%	-2.1%	-5.2%	8.5%	8.6%	-8.4%
	White Course Success Rates							
	Non-native Speaker		Basic Skills Level		Associate Degree Level		Transfer Level	
	English 9	English 10	English 50	English 55	English 51	English 56	English 101**	English 105
Fall 1996		NA	55.8%	50.6%	46.3%	62.5%	59.5%	58.9%
Fall 2001		NA	60.5%	52.2%	53.5%	71.3%	64.5%	53.9%
Change		NA	4.7%	1.6%	7.2%	8.8%	5.0%	-5.0%

Note 1: English 9 was replaced by three courses in 2000: ESOL 30, ESOL 31, and ESOL 32.

Thus, there is no comparable data.

Note 2: English 10 was replaced in 2000 by ESOL 40.

Note 3: NA - Not applicable because enrollment numbers were too small.

Note 4: Shaded columns reflect significant changes.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table F-10

Math Courses - FIVE-YEAR CHANGE - Fall 1996 vs. Fall 2001

	Total Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54 [†]	Math 100 ^{***}	Math 104	Math 116 ^{***}	Math 119*	Math 121 ^{***}	Math 141 ^{***}
Fall 1996	50.3%	54.7%	47.5%	44.7%	46.2%	55.8%	50.9%	55.9%	38.9%
Fall 2001	52.3%	52.5%	46.7%	50.2%	49.9%	44.0%	56.4%	69.4%	52.0%
Change	2.0%	-2.2%	-0.8%	5.5%	3.7%	-11.8%	5.5%	13.5%	13.1%
	Asian Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54	Math 100	Math 104	Math 116	Math 119	Math 121 ^{**}	Math 141 ^{**}
Fall 1996	71.9%	65.9%	62.6%	53.6%	48.9%	58.9%	50.0%	56.5%	35.5%
Fall 2001	58.1%	62.3%	58.0%	60.4%	48.7%	48.2%	61.2%	81.1%	56.0%
Change	-13.8%	-3.6%	-4.6%	6.8%	-0.2%	-10.7%	11.2%	24.6%	20.5%
	Latino Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54	Math 100	Math 104	Math 116	Math 119	Math 121	Math 141 ^{**}
Fall 1996	47.6%	51.5%	41.7%	39.4%	45.7%	42.3%	44.1%	32.4%	24.4%
Fall 2001	48.9%	45.7%	37.1%	40.9%	40.9%	36.3%	45.3%	52.6%	51.7%
Change	1.3%	-5.8%	-4.6%	1.5%	-4.8%	-6.0%	1.2%	20.2%	27.3%
	African American Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54	Math 100	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	48.8%	42.8%	33.4%	27.6%	22.2%	35.6%	43.9%	45.5%	25.8%
Fall 2001	44.6%	38.3%	30.4%	35.8%	37.0%	30.0%	44.2%	52.9%	33.3%
Change	-4.2%	-4.5%	-3.0%	8.2%	14.8%	-5.6%	0.3%	7.4%	7.5%
	Filipino Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32	Math 35	Math 54*	Math 100	Math 104	Math 116	Math 119	Math 121	Math 141
Fall 1996	45.8%	69.3%	44.4%	50.3%	44.9%	59.5%	42.4%	50.0%	65.5%
Fall 2001	56.3%	69.0%	56.7%	51.5%	46.0%	48.8%	54.5%	72.0%	39.5%
Change	10.5%	-0.3%	12.3%	1.2%	1.1%	-10.7%	12.1%	22.0%	-26.0%
	White Course Success Rates								
	Basic Skills Level		Associate Degree Level		Transfer Level				
	Math 32*	Math 35	Math 54	Math 100 ^{**}	Math 104	Math 116 ^{**}	Math 119	Math 121	Math 141 ^{**}
Fall 1996	46.0%	59.4%	52.9%	48.2%	50.7%	59.7%	55.2%	65.6%	41.1%
Fall 2001	62.5%	61.5%	52.3%	55.6%	58.5%	45.4%	61.1%	69.4%	59.1%
Change	16.5%	2.1%	-0.6%	7.4%	7.8%	-14.3%	5.9%	3.8%	18.0%

Note 1: Math 54 was replaced in 1999 by Math 95.

Note 2: Math 100 was replaced in 2000 by Math 96.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table F-11

Other Courses - FIVE-YEAR CHANGE - Fall 1996 vs. Fall 2001

Total Course Success Rates		
	Biology 205*	Spanish 102
Fall 1996	71.3%	68.1%
Fall 2001	80.6%	67.7%
Change	9.3%	-0.4%
Asian Course Success Rates		
	Biology 205*	Spanish 102
Fall 1996	66.7%	71.4%
Fall 2001	90.5%	71.4%
Change	23.8%	0.0%
Latino Course Success Rates		
	Biology 205	Spanish 102
Fall 1996	68.4%	77.8%
Fall 2001	73.3%	77.9%
Change	4.9%	0.1%
African American Course Success Rates		
	Biology 205	Spanish 102
Fall 1996	61.9%	67.2%
Fall 2001	66.7%	56.1%
Change	4.8%	-11.1%
Filipino Course Success Rates		
	Biology 205	Spanish 102
Fall 1996	74.4%	57.7%
Fall 2001	73.3%	61.1%
Change	-1.1%	3.4%
White Course Success Rates		
	Biology 205*	Spanish 102
Fall 1996	71.0%	66.0%
Fall 2001	85.2%	68.2%
Change	14.2%	2.2%

Note: Shaded columns reflect significant changes.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

Table F-12

Change in Term Retention Rate by Ethnic Group
FIVE-YEAR CHANGE - Fall 1996 vs. Fall 2001

Total Term Retention Rates		
	All District Students***	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹
Fall 1996	73.8%	86.8%
Fall 2001	77.8%	90.7%
Change	4.0%	3.9%
Asian Term Retention Rates		
	All District Asian Students	Students Enrolled in Prerequisite-enforced English or Math Courses ¹
Fall 1996	77.8%	90.7%
Fall 2001	78.6%	91.6%
Change	0.8%	0.9%
Latino Term Retention Rates		
	All District Latino Students***	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹
Fall 1996	74.6%	85.5%
Fall 2001	77.3%	89.5%
Change	2.7%	4.0%
African American Term Retention Rates		
	All District African American Students***	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹
Fall 1996	69.4%	83.2%
Fall 2001	74.3%	89.8%
Change	4.9%	6.6%
Filipino Term Retention Rates		
	All District Filipino Students***	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹
Fall 1996	76.3%	89.4%
Fall 2001	80.2%	94.3%
Change	3.9%	4.9%
White Term Retention Rates		
	All District White Students***	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹
Fall 1996	73.7%	86.7%
Fall 2001	78.5%	90.8%
Change	4.8%	4.1%

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.

1. Unduplicated count of students enrolled in at least one of the

Note: Shaded columns reflect significant changes.

Table F-13

Change in Term-to-Term Persistence Rate by Ethnic Group
Students Enrolled in English and Math - FIVE-YEAR CHANGE - Fall 1996 vs. Fall 2001

Total Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses* ²
Fall 1996 to Spring 1997	79.6%	87.1%
Fall 2001 to Spring 2002	76.1%	85.5%
Change	-3.5%	-1.6%
Asian Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses* ²
Fall 1996 to Spring 1997	86.1%	91.3%
Fall 2001 to Spring 2002	79.8%	87.5%
Change	-6.3%	-3.8%
Latino Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses* ²
Fall 1996 to Spring 1997	79.7%	87.6%
Fall 2001 to Spring 2002	75.3%	86.4%
Change	-4.4%	-1.2%
African American Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses*** ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses* ²
Fall 1996 to Spring 1997	79.9%	89.4%
Fall 2001 to Spring 2002	73.9%	85.9%
Change	-6.0%	-3.5%
Filipino Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses* ²
Fall 1996 to Spring 1997	79.2%	83.4%
Fall 2001 to Spring 2002	82.5%	89.2%
Change	3.3%	5.8%
White Term-to-Term Persistence Rates		
	Students Enrolled in Prerequisite-enforced English or Math Courses* ¹	Students Successfully Completing Prerequisite-enforced English or Math Courses* ²
Fall 1996 to Spring 1997	76.9%	85.3%
Fall 2001 to Spring 2002	74.8%	83.5%
Change	-2.1%	-1.8%

1. Unduplicated count of students enrolled in at least one of the 1997 prerequisite-enforced English or math courses examined in this report.

2. Unduplicated count of students successfully completing at least one of the 1997 prerequisite-enforced English or math courses examined in this report.

Note: Shaded columns reflect significant changes.

* Significant at the .05 level.

** Significant at the .01 level.

*** Significant at the .001 level.



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